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Problems of Executive Reorganization:
The Federal Environmental Protection Agency

John F. Wall
Leonard B. Dworsky

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FOREWORD

The purpose of this case study is to review the problems associated with Federal Government reorganization to manage environmental problems; to assess the gains and losses resulting; and to contribute hopefully to the knowledge of those involved in future reorganizations. Advocates and antagonists in the continuing search for an environmental agency are either involved in or reflect many of the same considerations that take place in other struggles to determine the one best method to attack and control a public issue.

Change is necessary and desirable in a democracy to control the bureaucracy and to seek improved government efficiency. Periodically, agencies need to be consolidated or eliminated. Reorganization also causes bureaucratic ferment in its search for a new style, approach, and emphasis and this ferment can result in disruption and inefficiency for extended periods of time.

This study attempts to remain impartial and objective. While trying to cover major points, no claim is made that this discussion represents an encyclopedia on Federal reorganizational problems associated with the environmental program. It is clear that strong interest exists and continues to press for the establishment of other reorganization plans involving a single water agency and Departments of Natural Resources, Human Resources, Community Development, and Economic Development. These and other reorganizational issues are likely to follow similar scenarios. We hope that the conclusions drawn from this study of environmental reorganization will contribute toward the improved evaluation of the probable effects of future reorganizational proposals. In particular, it is hoped future considerations will do much more to mitigate the demoralizing consequences involving our most important and scarce national resource - the professional men and women who have dedicated their lives to their nation's service.

TABLE OF CONTENTS

Page

Summary. v

I The Environmental Protection Agency. 1

II Early Involvement in Water Pollution 3

III USPHS and the Beginning of the Modern Period 4

IV The Depression to 1950 6

V Air Pollution Control. 10

VI The Public Health Service as an Environmental Agency 12

VII Water Pollution Control Ping Pong--The Period 1961-1970. 17

- A. HEW Assumes Direct Water Pollution Control Authority. 17
- B. Creation of Federal Water Pollution Control Administration in HEW 18
- C. FWPCA Moves to the Department of the Interior 22
- D. Further Consolidation Within Interior 30

VIII Development of the Environmental Protection Agency 34

IX Epilogue 40

- A. Inefficiency and Time Losses Through Reorganization 40
- B. Degree of Consolidation 42
- C. Enforcement 44
- D. Identity and Future Priorities. 44
- E. Bureaucratic Cooperation and Morale 46
- F. Program Emphasis. 47
- G. Strategy and Politics 49

Figures. 53

Appendix 69

Bibliography 73

SUMMARY

The modernization of government by establishing new entities or reorganizing existing units is one important way in which government arranges its resources and undertakes programs to solve problems of society. There are varying degrees of difficulty in determining the best course to follow in these modernizing efforts. A Cancer Institute would appear to fit quite properly within a National Institute of Health. A Forest Service fits well either within a Department of Agriculture or of Interior and this organizational question is periodically debated by Congress.

Organization for environmental management involves not only placing like matters together, but involves also breaking with the usual practice of relating organization to functional (productive) types of activities by combining horizontally across government programs that can be identified with broadly defined subjects like "environment" or "natural resources." It is not too surprising, then, that Congress and the Executive Branch have acted in spurts, reversed direction and been uncertain of their ground in considering organizational proposals for environmental activities.

This paper has examined a number, but not all, of the problems that have resulted from this exercise in reorganization by the Federal Government. Its main findings are:

- The tortuous and circuitous approach to environmental organizational development has lost significant amounts of time.

- Programs (like water hygiene and water research laboratories) either lost visibility or suffered setbacks with resultant serious losses to the effectiveness of Government to keep alert to emerging problems (for example, toxic chemicals and mercury in relation to human health).

- Reorganization of environmental matters has not, in fact, consolidated the governmental effort, either within the Executive Branch or in the Congress. There remains the question of whether organizational neatness (lumping all like programs together) is wholly desirable to protect the public interest. The effective management of broad fields such as environment, water resources or natural resources is widely diffused through government as integral parts of programs and reorganization offers no simple panacea to visualized problems.

- Reorganization will not contribute directly to the effectiveness of enforcement over environmental problems. The Congress has designed relatively weak Federal laws in the past; has the capacity to develop effective laws at any time; has not yet done so in relation to the need. Neither has the record of the Executive Branch shown a great

willingness to pursue really effective enforcement. Unless the will is present, reorganization will not provide an adequate substitute for remedial action.

- Establishment of environmental matters as a high priority objective together with the provision of an adequate budget have not, until now, been achieved. The present thrust of the Federal Government, in both Executive and Legislative Branches, seems likely to attain this desired objective. Reorganization by itself contributes little to the formation of priorities and budgetary policy unless the proper "time" has come for action on a specific program. If desired, and without reorganization, action could have been taken in previous years to do that which seems now to be happening in environmental control efforts. Again, reorganization must not be mistaken as the only, or even the essential effective entrance to improved program development.

- Educated, talented and motivated human beings are the core of any organization. Reorganization, unless very carefully undertaken, can destroy this essential element and create either losses of valuable time in rebuilding, or by irreversibly changing the nature of an organization to the point where it never recovers its effectiveness.

- The reasons for governmental failure need to be carefully assessed. Programs and Departments are easily made scapegoats for inadequacies within the Congress or within the Executive Office of the President. The effect of budgeting policy, top policy guidance or pressure groups are often matters that executive agencies cannot fight against effectively. Under conditions of uncertainty in these areas, it is not unusual for agencies to carry the public burden leaving political figures free of responsibility.

- The public reasonably can expect that reorganization of environmental programs will bring about strong efforts to undertake expeditiously and effectively the actions that are clearly needed to help solve the major public issue we call "pollution." The responsibility of the Environmental Protection Agency must be to prove to the public that it can act responsibly and be responsive to the evident public desires to reduce stresses from pollution of the air, water and land.

- If this is accomplished, perhaps reorganization can be given substantial credit for this important achievement.

I THE ENVIRONMENTAL PROTECTION AGENCY

On July 9, 1970, President Nixon forwarded Reorganization Plans No. 3 and No. 4 of 1970 to the Congress and underscored the pressing national need to improve and "know more about the total environment - land, water, and air. It has become increasingly clear that only by reorganizing our Federal efforts can we develop that knowledge, and effectively ensure the protection, development, and enhancement of the total environment itself." He noted the apparent incremental growth and development of the nation's environmental agencies and urged a new, national, and systematic approach to organizational structuring.

Reorganization Plan No. 3 consolidated certain environmental activities of the Federal government in the new and independent Environmental Protection Agency (EPA). President Nixon delineated its principal functions as:

a. Establish and enforce environmental protection standards.

b. Conduct research, gather and evaluate pollution information, strengthen environmental protection programs, and recommend policy changes.

c. Assist in environmental pollution arrestment by grants, technical assistance, and by other means.

d. Assist the Council on Environmental Quality (CEQ).

President Nixon visualized that EPA will attack pollution in five basic areas - water, air, solid waste, radiation, and pesticides. To accomplish what is hoped to be a concerted and centralized attack on pollution, the EPA Administrator will have an estimated fiscal year 1971 budget of $1.4 billion and about 6,000 personnel.* He will assume responsibility for the following functions and agencies:

a. From the Secretary of the Interior:

- Federal Water Quality Administration (FWQA).
- Gulf Breeze Biological Laboratory, Gulf Breeze, Florida (Bureau of Commercial Fisheries).
- Water Pollution Control Advisory Board.
- Functions relating to studies on insecticide, herbicide, fungcide, and pesticide effects on fish and wildlife.

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*The President's Budget Message of 29 January 1971 proposed that the FY 1972 budget comprise $2.5 billion and provide for a personnel increase of 2,640.

b. From the Secretary of Health, Education, and Welfare (HEW):

- National Air Pollution Control Administration (NAPCA).
- Parts of the Environmental Control Administration (ECA) (Bureau of Solid Waste Management, Bureau of Water Hygiene, and environmental portions of the Bureau of Radiological Health).
- Air Quality Advisory Board.
- Pesticides research and regulatory programs of the Food and Drug Administration.

c. From the Secretary of Agriculture:

- Insecticide, fungicide, and rodenticide registration and related authority.

d. From the Council on Environmental Quality

- Duties and functions to conduct investigation, studies, surveys, research, and analyses relating to ecological systems, and environmental quality.

e. From the Federal Radiation Council:

- All functions.

f. From the Atomic Energy Commission (AEC):

- Environmental radiation and protection standard setting functions.

It is interesting to trace the development of this new and comprehensive agency that will meet and hopefully overcome the environmental pollution challenge.

II EARLY INVOLVEMENT IN WATER POLLUTION

A history of any American institution concerned with environmental problems quickly discovers a lineage from the Public Health Service. Therefore, this discussion commences in the very early days of our nation when it was common practice to provide medical treatment for the merchant marine. As early as 1708, Virginia set aside a house as a marine hospital. Since 1730, the English Parliament taxed seamen in the Colonies to support a marine hospital in Greenwich. Marine societies in Boston (1742) and New York (1768) aided distressed shipmasters and their survivors. In 1780, Virginia taxed all seamen in the state to support their marine hospital. North Carolina followed this example in 1789. On July 16, 1798, President John Adams signed an act creating the Marine Hospital Service under the Treasury and providing for marine hospital construction and for the relief of sick and disabled seamen.

Early in our history and as a matter of necessity, individual states originated public health organizations to combat water borne diseases, set water standards, regulate sewage and pollution, and to isolate diseases. A 1726 South Carolina statute prohibited pollution harmful to fish. Louisiana formed a quarantine board in 1855 and Massachusetts established the first Public Health Board in 1869. However, the Federal Government accepted public health responsibilities slowly.

In 1870, the Treasury elevated the Marine Hospital Service to bureau status. In 1878, Congress passed the first National Quarantine Act. An Act of June 2, 1879 established a National Board of Health but the life of this organization was restricted to four years. The Act of June 4, 1889 established the Commissioned Corps of the Service - a facet of the Public Health Service today that develops and maintains a strong esprit de corps. Outbreaks of yellow fever, bubonic plague, and cholera prompted Congress to increase federal health measures and it passed acts of 1890 and 1893 establishing interstate quarantine procedures and strengthening the weak and ineffective quarantine act of 1878.

The first federal laws to present water pollution actually dealt with impediments to navigation. An 1886 Act prohibited the deposit of refuse in New York Harbor and designated the Army Corps of Engineers as the enforcement agency. The 1888 Amendment extended the definition of refuse to all materials not in a liquid state flowing from the city's streets and extended the limits to all waters adjacent to the harbor. The Rivers and Harbors Act of 1899 prohibited the deposit of refuse in any navigable stream that might impede navigation.

III USPHS AND THE BEGINNING OF THE MODERN PERIOD

In 1901, the Marine Hospital Service organized a division of scientific research and devoted attention to the study of stream pollution relative to typhoid fever. These and similar investigations were to continue to the present day. The Service traced typhoid to shellfish in sewage contaminated waters in 1908 and conducted extensive investigations of oyster waters from that time to 1916. In 1925, typhoid was again traced to raw oysters - this time in New York City. About the same time, the Stream Pollution Investigation Station in Cincinnati investigated water purification methods to control water borne diseases. In 1950, hepatitis was traced to clams in sewage contaminated waters off the New Jersey coast.

The acceptance of a national health obligation occurred under an act of July 1, 1902 which changed the name of the Service to the Public Health and Marine Hospital Service and authorized certain administrative divisions. The Service participated as members of an interstate commission to investigate pollution of Lake Michigan in 1908. Commission memberships included the War Department, and representatives of Chicago, Milwaukee, Grand Rapids, Wisconsin, Illinois, Michigan, and Indiana. The same year a similar group studied pollution in Lake Erie. In 1909, the Public Health and Marine Hospital Service assisted the International Boundary Commission in pollution investigation in United States - Canada boundary waters. Similar assistance was provided in stream basins along the border between this country and Mexico. The Service conducted a sewage pollution investigation throughout the Great Lakes in 1910 - the first such systematic study of an entire region.

Congress recognized the first real national obligation for the protection of the environment by passing the Public Health Service Act of August 14, 1912. This Act ommitted any reference to the Marine Hospital Service and it became known as the United States Public Health Service (USPHS). Congress authorized field investigations and studies of the diseases of man, sanitation, sewage, and the pollution of navigable streams and lakes. Public health followed the general pattern of congressional restraint and the USPHS was appropriated sufficient funds and given sufficient authority only when emergencies occurred. Although at least one water pollution bill has been before every congress for the last 90 years, Congress did not update the provisions of the USPHS Act of 1912 until 1948.

In spite of these limitations, USPHS commenced several noteworthy programs prior to interruptions caused by World War I. Among these were the sewage pollution survey and bacteriological examination of the Missouri River in 1912 and the establishment of field laboratories (under the Division of Scientific Research in 1913). Initially, laboratory technicians conducted studies of:

a. Sewage and industrial wastes biochemistry to include Biochemical Oxygen Demand (BOD) determinations and stream oxygen capacities.

b. Waste treatment

c. Pollution and natural purification of the Potomac and Ohio Rivers.

After the first World War, USPHS resumed stream pollution studies and developed comprehensive health plans on the basis of cooperative efforts of Federal, State, local and voluntary organizations. The Service strongly encouraged organizations such as the Association of State and Territorial Health Offices which at a 1919 New Orleans conference discussed for the first time the need for closer cooperation among the States in environmental control activities. The Association's "Conference of State Sanitary Engineers" through the years "has contributed a great deal to the effective development of common objectives between the States and the Federal Government [and] of the acceptance of common standards and technical procedures ... In addition, the Conference provided a meeting ground for the informal testing and sharing of new ideas." (4-pg 23) The publication of Public Health Engineering Abstracts widely disseminated technical information. The Surgeon General appointed a 1922 Advisory Committee on Drinking Water Standards and about the same time commenced studies of the problems of industrial waste disposal. The Oil Pollution Act of 1924 was approved "to protect navigation from obstruction or injury by preventing the discharge of oil into the coastal navigable waters of the United States" (4-pg 41) and charged the Secretary of War (Army Corps of Engineers) with enforcement.

IV THE DEPRESSION TO 1950

Events during the Depression increased the nation's awareness of and its capacity for fighting water pollution. A leading light in this field Senator Augustine Lonergan called a conference in 1934 of interested parties (Federal Agencies, several States, Congressional Wildlife Committees, Izack Walton League of America, American Society for the Advancement of Science) to reconcile the anti-pollution interests of public health, navigation, industrial development and others and to recommend a national program. This and similar efforts resulted in the passage of the first water pollution control bill (Barkley - Vinson Bill) in 1939; however, because of a technicality over grants-in-aid administration, President Roosevelt vetoed it. The nation was not to obtain its first Federal Water Pollution Control Act until Senate 418 became law in 1948.

To counteract effects of the depression, the Federal Government applied immense public funds through the construction programs of the Works Progress Administration (WPA) and the Public Works Administration (PWA). Criteria developed by WPA, PWA, USPHS, and the National Resources Committee and later the Water Resources Committee of the National Resources Planning Board (NRPB) markedly increased the public health posture of the nation in many areas. Specifically in water pollution, projects were not constructed where untreated sewage would be discharged into streams. USPHS continued to work closely with the National Resources Planning Board to set standards for public works and for Federal financial Grants until 1943 when the NRPB was dissolved. Afterwards, USPHS helped to develop criteria with the Federal Inter-Agency River Basin Committee (FIARBC). NRPB Federal agency members voluntarily established FIARBC to exchange "information on activities relating to developments involving water use" and permitting "the preparation of reports on multiple purpose projects." Members included the War Department (Corps of Engineers), Interior, Agriculture, and the Federal Power Commission. Commerce joined in 1946; USPHS represented the Federal Security Agency upon its inclusion in 1950. FIARBC representatives participated in regional water resource development and planning through inter-agency field committees established in certain river basins (Missouri, Columbia, Arkansas-White-Red, Pacific Southwest, and New England-New York).

The Social Security Act of 1935 increased the authority of the Public Health Service to act as a Federal partner to the States in public health and anti-pollution activities by authorizing it to administer certain grant-in-aid funds. In 1936, the USPHS and the Army Corps of Engineers joined forces and conducted the first pollution survey of an entire river basin and their 1943 report of the Ohio River (H.D. 266, 78th Congress, 1st Session) remains a classic in the field today.

Reorganization Plan No. 1 of 1939 transferred the Public Health Service from the Treasury Department to the Federal Security Agency (FSA); however, the relative bureaucratic position of USPHS remained unchanged.

To determine the nation's sanitary, water supply, and pollution control requirements, the USPHS conducted a number of surveys from 1944-1947. These investigations provided an excellent base upon which to request and enact future pollution control legislation and surfaced indicators of the mammouth problems of future solid waste disposal. The Service directed full time research to this solid waste problem in 1949 and subsequently has developed much of the current technology in that area.

Unfortunately, Congress sometimes requires the impetus of series of catastrophes to assume necessary national obligations. The establishment of Federal air pollution controls was no exception. Although air pollution control can be traced as early as 1300 in London, this nation did not seriously concern itself with the problem until recently. Large cities studied smoke, soot, and ash problems between 1890-1914. "It was not until after 1900 that serious investigations were made of industrial diseases, including the question of hazards due to dusts, fumes, and toxic substances." Early air pollution control was an outgrowth of industrial hygiene programs. "In 1912, USPHS organized a Division of Industrial Hygiene and stimulated the development of official state industrial hygiene services. The Social Security Act of 1935 provided a program of grants to further strengthen state efforts and by 1940 every state and many large cities had special divisions of industrial hygiene as part of their health services." (4-pg 578) By concentrating on the health of industrial workers, these efforts had developed by 1950 "specialized knowledge essential to the formation of current air pollution control efforts." (4-pg 581) Research progressed from smoke, soot, silicosis, and carbon monoxide through toxicology investigations (mercury, lead, arsenic, chromium, radium, etc.) to "the newer virulent economic poisons such as parathion and other organic phosphates." This scientific knowledge and technical competency gave the Public Health Service the expertise to respond to the rapid development of the air pollution problem. (4-pg 584)

Radiation fall-out scares and nuclear testing triggered considered and emotional outbursts from the general public for increased federal regulation, restraint, and control. Recognizing a deficiency in the civilian radiological technical and safety field, USPHS instituted the first radiological health program outside the military and Atomic Energy Commission fields. In 1947, it formed an atomic radiation hazard unit and in 1949 organized a Division of Engineering Resources. The Radiological Health Branch was assigned to this new division. Later the National Radiation Council and the Center for Radiation Research (radiation standards section) of the Bureau of Standards were constituted from elements of this division.

In 1948, a toxic smog at Donora, Pennsylvania killed 20 persons and sickened an additional 5910; 43 per cent of the population were directly afflicted. In spite of the fact that two other disasters occurred in 1952 and 1953 (4000 deaths in a London fog, over 200 deaths in New York) and that many Californians complained of potentially serious health hazards and discomfort from smogs in Los Angeles, the USPHS was not allowed to develop an air pollution control program by the Congress until 1955.

Before 1948, individual States were primarily responsible for enacting and enforcing measures to prevent and control water pollution. USPHS, concentrated its efforts on sanitation, the quality of drinking water supplies, the diseases of man, pest control, common standards, sewage treatment, and the encouragement of state health organizations. While water pollution was of major interest as a health hazard, studies and research considered integrally with health, the problems of aquatic biology, recreation and other uses of water. Although conservation societies and lobbies were already alarmed, it would be some time before they were strong enough to influence and to dictate in large measure the thrust of national policy and government organization. USPHS drew its non-governmental support from such organizations as the American Public Health Association, American Water Works Association, Water Pollution Control Federation, the American Chemical Society as well as from the Izaak Walton League and the National Wildlife Federation.

The nation obtained its first Federal Water Pollution Control Act on June 30, 1948 and thus began a new era of water pollution activities for the Public Health Service. Public Law 80-845 directed the Surgeon General to develop a comprehensive program to abate and control water pollution, administer grants-in-aid, conduct research, render technical assistance, and to enforce anti-pollution measures in interstate waters, but only with the consent of affected States. It also authorized compacts between two or more States for the purpose of water pollution control and abatement and established a Water Pollution Control Advisory Board.

Up to this time, the Surgeon General had discharged his water pollution duties through his Division of Sanitary Engineering. In reorganizing to meet his new obligations, he established the Division of Water Pollution Control from resources of that division which he redesignated the Division of Sanitation. To compensate for the dilution of the Bureau Chief's span of attention over what were to be 14 divisions by 1950, the former Chief of Division of Sanitary Engineering was promoted to perform duties as Associate Bureau Chief and as Chief Sanitary Engineering Officer. The responsibilities of the Associate Bureau Chief included sanitation, water pollution control, industrial hygiene (air pollution control) radiological health, and environmental research.

In 1950, President Truman transfered the responsibility for grants and loans for water pollution control from the Federal Works Agency of the General Services Administration to the Federal Security Agency and thus consolidated all functions of the 1948 Water Pollution Act within USPHS.

Reorganization Plan No. 16 of 1950 stated in part:

> At the present time over 90 percent of the administration of the water pollution control activities authorized by Public Law 845, 80th Congress, is carried on by the Public Health Service of the Federal Security Agency. That agency

> is already responsible for the preparation of comprehensive water pollution control plans for interstate streams, for the conduct of surveys and research, for the maintenance of relationships with State water pollution control agencies, and for the approval of sewage treatment projects for which grants or loans are requested by State or local authorities. The effect of the plan will be to place the entire responsibility for the approval and administration of the grant and loan provisions of the Water Pollution Control Act in the Federal Security Agency, as the agency with the predominant interest in the attainment of the objectives of the legislation.
>
> The consolidation of water pollution control functions will simplify relationships with the State and local governments participating in the program. Under the existing arrangements two Federal agencies must take part in the review and approval of each request for a grant or loan. The reorganization plan will make it possible for applicants to look exclusively to the river basin offices of the Public Health Service in seeking information or assistance in the abatement of water pollution.

To fulfill these new duties at the operating level, the Surgeon General with the concurrence of the FSA Administrator radically departed from the FSA field office concept of State political boundaries by proposing realistic pollution control regions along the natural watersheds of 14 major river basins. Figure 1.

By 1950 the Public Health Service was organized as shown by figure 2 and had grouped its divisions and branches concerned with the environment under the grouping "Environmental Health Service" (figure 3).

Drinking Water
Water Pollution Control
Air Pollution Control
Milk and Food
Pest Control
Health and Safety at Home
Refuse Control
School and Rural Environments
Protection for Travelers
Industrial Health
Radiological Health
Basic and Applied Research

V AIR POLLUTION CONTROL

By the mid-1950's the Public Health Service had largely solved the more significant health problems connected with water-borne diseases and began to devote greater attention to air pollution problems with more serious medical implications. Largely because of the direct health implications of air pollution and the Public Health Services satisfactory execution this mission, Federal Air pollution control activities were to remain in HEW until the creation of the Environmental Protection Agency in December 1970. This is not to imply that there were no attacks mounted to transfer this function from USPHS and HEW. During the fierce infighting to pass the model cities act of 1966, it was proposed to transfer air pollution control activities to the new department of Housing and Urban Development where it was thought air pollution would have a more appropriate application. Probably pressure for this transfer was relaxed because HEW Secretary Gardner was already losing water pollution control to Interior that same year.

Congress approved the first Federal air pollution control legislation in 1955. Although Federal entry into air pollution came later by seven years than Federal water pollution control measures, it advanced at a relatively more rapid pace especially after the nation fully recognized the implications of the Donora disaster. In 1950, no Federal agency was authorized to coordinate air pollution control. (7) That same year Surgeon General Scheele in testimony before a Subcommittee of the House Appropriations Committee requested directly for the first time, funds to meet air pollution problems. Bills were introduced in the 81st, 82nd, and 83rd Congresses; none passed. In late 1954 and in answer to increasing political pressures resulting from California smog incidents, HEW Secretary Oveta C. Hobby formed an ad hoc interdepartmental committee to investigate the federal role in community air pollution problems. The subsequent report endorsed by HEW, AEC, Departments of Agriculture, Commerce, Defense, and Interior, and the National Science Foundation paved the way for the passage of Senate 928 and Presidential approval of Public Law 84-159 on July 14, 1955. This law was rather limited in scope; but, although recognizing the primacy of local government in dealing with air pollution, it authorized federal technical assistance and air pollution research and encouraged cooperative activities by States and local governments. The Act was to be administered by the Secretary of HEW and authorized him "to make financial grants to, and enter into contracts with, other governmental and private agencies and individuals for surveys, studies, research, training, and demonstration projects." (4) Three amendments (P.L. 86-365, 86- 493, 87-761) in the next seven years extended the 1955 act and authorized vehicular exhaust pollution studies on a continuing basis. During this period, USPHS established a Division of Air Pollution Control within the Bureau of State Services.

Public Law 88-206 (The Clean Air Act of 1963) established the principle of Federal "air pollution enforcement and financial aid. In addition to these two programs, the Act provided programs relating to (1) encouragement of cooperative activities by the States and local governments and to the encouragement of uniform laws; (2) research, investigations, training, and the collection of dissemination of information; (3) grants to air pollution control agencies in amounts up to two-thirds of the cost of such programs; (4) enforcement to control air pollution which endangers the health or welfare of any persons; (5) automotive vehicle and fuel pollution; and (6) cooperation by Federal agencies to control air pollution from Federal facilities." (4-pg 603) The 1965 amendment (P.L. 89-272) authorized HEW to set automotive exhaust standards, further strengthened the role of the Federal government, and stimulated action in the field of air contamination due to solid waste disposal. Public Law 89-675 (1966) extended the program and authorized greater flexibility in grand administration and use.

The Air Quality Act of 1967 established a "new national objective nearly identical with that in the 1965 amendments to the Water Pollution Control Act" by stating one of its purposes as "to protect and enhance the quality of the nation's air resources so as to promote the public health and welfare and the productive capacity of its population." (4-pg 605) In addition to the ongoing provisions of previous acts, the 1967 law gave increased authority to the Secretary of HEW to:

1. "Prevent future air pollution episodes,
2. Require States to set air pollution standards for selected regions under the Secretary's supervision,
3. Establish interstate or intrastate air quality control regions in connection with state standard setting procedures,
4. Develop and publish criteria ..., and
5. Study possibilities of developing national standards to control emissions from major industries." (4-pg 606)

VI THE PUBLIC HEALTH SERVICE AS AN ENVIRONMENTAL AGENCY

By 1950, as previously shown, the Public Health Service directed all Federal water pollution control activities and controlled most of the other functions related to human environmental health. Other areas of specialization such as water resource development and construction, Food and Drug Administration, and effects of chemicals on vegetation, fish and wildlife remained in other executive agencies.

An important evaluation of any operating agency of the Executive Branch is its relation and the quality of service to its clients. Its domestic clients are State governments, local governments, sometimes individuals or small groups of them, and other Federal agencies. These act as sounding boards of the agency's effectiveness, but the real test of its capacity to survive is its ability to persuade congressional committees that:

a. It has meaningful and significant missions;

b. it properly assigns priorities and internal resources to the "correct" elements (the "in" things), and;

c. it enjoys demonstrable support not only from its clients but from nongovernmental organizations and lobbies.

A danger of such a system is the tendency for agencies to make power plays to justify their existance by empire building. This temptation to assume a larger mission and consolidate more power and functions under one head appears to be an occupational hazard of government service and large organizations. However, the system is not necessarily bad and, in fact, opportunities to serve better are sometimes lost when agencies react passively to such challenges.

That the Public Health Service served its public health clients well can not be denied. Its work with the American Public Health Association, the conference of State Sanitary Engineers, all State health organizations, and participation in health surveys in specific areas bear this out. Even though health surveys such as the Chicago-Cook County Survey of the late nineteen-forties devoted one-third of its effort to environmental sanitation, the emphasis was on facilities and services for Medical care and on preventative medicine.

In its internal organization, the Public Health Service gave major priority to disease research and treatment. This is not to imply that the primary emphasis was misplaced but to suggest that the Public Health Service neglected to grasp the significance of the environmental problem and failed to recognize a chance to grow and to better serve the nation in the area of environmental health.

In 1950, the Public Health Service possessed the necessary expertise and background information to move strongly to a dominant position in the environmental protection field. The Chicago-Cook County Health Survey of 1947 gave many indicators where the metropolitan environmental emphasis should lie. In 1948, Oscar R. Ewing, the Administrator of the Federal Security Agency convened a National Health Assembly to formulate a ten-year plan to expand the country's health resources and to raise her health standards. One section of its report dealt with "A National Program of Environmental Sanitation." Following 1949 Surgeon General Scheele invited 22 major industries to organize a National Technical Task Committee on Industrial Wastes to develop "practical methods of reclaiming, reducing, and treating wastes." (1) Personnel of the Environmental Health Center laboratories (figure 4) conducted research, performed investigations, surveyed, and continued to train and assist State and local environmental health organizations. In spite of this approach USPHS did not recognize environmental pollution as a driving issue and devoted neither the time nor the interest to integrate all public health issues into an acceptable national program involving Congress, industry, conservation and other public interests. Wide ranging interests, traditional high priorities of health and sanitation, relatively greater importance of research in cancer, heart, and other diseases all contributed to the neglect of water pollution control.

The Public Health Service appeared enthusiastic about water pollution responsibilities and future plans in 1952 testimony before the Committee on Public Works of the House of Representatives to extend the 1948 Water Pollution Control Act. However after Public Law 82-579 provided an extension of three years, enthusiasm waned. In part, this was a result of reorganization Plan No. 1 of 1953 which abolished FSA and established the Department of Health, Education, and Welfare. The bureaucratic position of USPHS remained unchanged in this new organization, but competition for appropriations remained keen. In addition, the new administration had given no indication that water pollution control was of priority concern. Philosophically it did not support construction assistance to the cities and PHS was under little pressure to strengthen the pollution control area. Under pressures of shrinking budgets, water pollution programs suffered more than those in pure health areas. In a July 1953 memorandum to the Chief of the Bureau of States Services, Carl E. Schwob, Chief of the Water Pollution Control Division, argued for restoration of FY 1954 funds cut from his division's appropriations. Apparently, 70 per cent of a $525,000 decrease was to be sustained by Water Pollution Control functions. (10) Schwob poignantly emphasized that this downgrading of water pollution would endanger the support USPHS marginally enjoyed from organizations that considered water pollution control critical. As an example of the importance to retain the support of conservation groups, Schwob also noted that "the National Wildlife Federation, with 48 State affiliates and nearly 4 million members, will have as its theme for National Wildlife week in 1954, 'Control Water Pollution.'" (10)* Schwob also noted that pressures from like groups might result in the loss of the Water Pollution Control Program from USPHS.

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*The National Wildlife Federation had great difficulties in getting support for this program from top echelons of the PHS and the Secretary of HEW. This rebuff was long remembered and no doubt played a role in the conservation organization seeking a secretary that would devote more time to their interests.

Schwob's predicament grew worse. For in the interest of rearranging the 16 divisions in the Bureau of State Services in a more effective and more manageable configuration, the Division of Water Pollution Control was to be downgraded to branch status. In a November 1953 memorandum, Schwob again set down cogent and deliberate warnings against further de-emphasizing of water pollution control.

> ---With respect to water pollution control, therefore, the Public Health Service must be considered as a placement point for a function which is of widespread interest to other Executive Departments. The fact that the public health aspect was considered the dominant purpose by the Congress places a special responsibility on the Service to insure full recognition of the non-public health interests as well. ---
>
> The Hoover Commission's statements of the interdependence of functions and the need for coordination between agencies support the view that the Public Health Service is a repository for a function which is of widespread interest to other Departments. It may be assumed from these considerations that the assignment of functions and the delineation of responsibilities within the Public Health Service with respect to pollution control should be sharp, and further, that the organizational placement of pollution control activities should be at not less than division level, in order that they can be accorded the respect which stems from formal organizational placement of work in the government scheme. ---
>
> We suggest that an apparent reduction in interest on the part of the Public Health Service in water pollution control will be reflected in the States. We believe that the Public Health Service must continue to show externally, in a tangible way, the importance that it gives to pollution abatement. ...(11)

Schwob's reasoning was rejected and his division reduced to branch status. As feared, this action precipitated events that led to the ultimate removal of the water pollution control mission from the Public Health Service.

Congress sustained its interest in water pollution control by passing Public Law 84-660 (1956) which amended the 1948 Water Pollution Control Act and by strengthening enforcement provisions and authorizing a new community sewage treatment construction grant program. Except for the chairmanship, it also eliminated Federal agency representation on the Water Pollution Control Advisory Board and provided for nine non-governmental members appointed by the President for non-successive terms of three years.

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In 1959, action was contemplated to restore water pollution control activities to division status; however this belated resurgence of demonstrated interest in the field by the Public Health Service did little to appease the ire of interested and influential conservation groups. In testimony before the House Committee on Public Works in April 1959, C.R. Gutermuth of the Wildlife Management Institute stated that:

> any move [to satisfy the demands for upgrading the water pollution control program by giving it division status within the Public Health Service] would be of little satisfaction to the conservationists...[Such a plan] would merely reinsert the program in an administrative slot it occupied several years ago. If implemented, it would raise water pollution control only one step in the long stairway of administrative hindrances that lead out of the subbasement. It is not the elevation that the public is demanding.
>
> The public wants water pollution control elevated to administrative stature commensurate with its importance to the well-being of the American people. The program officers must be able to get their heads above water, where they have some recognition in HEW, and where they can work with all levels of government...
>
> As it is, we find that it is virtually impossible to locate the appropriations for this work in this 1,000 page budget of the President. Water pollution control does not appear in the index. The appropriations are spread over several items under different headings, and we even, as well informed as we are with this program, cannot tell. Certainly the average Joe on the street could never find out the amount of money being appropriated for this work.
>
> Furthermore, we have very serious misgivings as to whether or not the amounts that are actually appropriated under those scattered headings in that appropriations are actually going for the work which we think they should go for. So we would like to see these items brought together under one budget heading, where people know the amount of effort going toward this work.

It continued to become increasingly obvious that the Public Health Service's institutional arrangement for water pollution control administration was unacceptable to the Congress and the public in general and to conservation organizations in particular. In 1961 hearings before the Subcommittee of the Senate Committee on Public Works (on amendments to provide a more effective program of water pollution control), representatives of many organizations testified in favor of removing water pollution control administration from the Public Health Service and vesting it directly under the Secretary of Health, Education and Welfare. In his testimony, C.R. Guttermuch defined the full thrust of the argument by stating that the program was controlled primarily by medical considerations and that it deserved to be on:

> full parity with flood control, navigation, irrigation, soil conservation, recreation, and other basic watershed programs. It should not be subordinated to measles and whooping cough... Pollution control must not remain a minor activity with only a medical mission. Much of the nation's economy is predicated on abundant clean water... Recognition is given the need for enhancement of the program so that water quality management can receive equal consideration along with all the other programs that relate to water resources, including public health.
>
> J.W. Penfold, Conservation Director, Izaak Walton League of America stated: ...pollution is no longer just a public health matter which is the area of special interest and competence of the Public Health Service, but is of vital concern to the nation's whole water supply for every conceivable kind of beneficial purpose. We believe it warrants status and stature in the Department of HEW commensurate with its importance.
>
> Spencer M. Smith, Jr., Secretary, Citizens Committee on Natural Resources:
>
> We feel strongly that any legislation should recognize quite clearly, that any programs envisaged should be raised in status within the Department of Health, Education and Welfare. This is not to suggest that the matter of public health is not of great and significant importance, but rather that the entire scope of water quality and quantity should consider more aspects of our total environment. Certainly the problem of propagation of fish, wildlife, industrial uses, irrigation, and agriculture, and the overwhelming responsibilities in the field of public recreation must be considered as a significant resource problem.

And so on. It was abundantly clear that the Public Health Service had failed to convince its clientele that it had properly assigned internal priorities or that it would be able to do so in the future. The Service "enjoyed" a no confidence vote for further support from non-governmental organizations and lobbies.

VII WATER POLLUTION CONTROL PING PONG--THE PERIOD 1961-1970

A. HEW Assumes Direct Water Pollution Control Authority

The Federal Pollution Control Act of 1961 (P.L. 87-88) transferred responsibility for the program from the Surgeon General to the direct supervision of the Secretary of Health, Education, and Welfare. Congress anticipated that the Secretary would reorganize the water pollution control organization and administration so as to give a more appropriate and meaningful priority.

This Act also increased financial aid, authorized for the first time water storage in Federal reservoirs for water quality control by stream flow regulation (dilution following effective treatment), authorized seven regional laboratories for sewage treatment and control research, and extended abatement provisions to intrastate and coastal waters. In enforcement, it permitted the Secretary to bring suit against interstate offenders without the permission of the affected States; however, State permission was required to prosecute polluters in other waters. The USPHS organization for environmental health in 1961 is illustrated in figure 5.

The Surgeon General of the Public Health Service did recognize the increasing pressures of a power squeeze in water pollution and in August of 1961, he established a Committee on Environmental Health Problems to develop long-range objectives for the environmental health program. The Committee noted the sensitivity of the water pollution control problem vis-a-vis Conservation organizations and included among its recommendations:

> ... Actions be taken to assure Congress and the public of the Service's full capacity for dealing with all aspects of the Federal water quality program, and that its program is an activity of major proportions which deals with water quality management for all water uses. (12-pg 216)

Other recommendations urged that water supply and pollution control activities be in one organization, be augmented, and its authorized regional laboratories be constructed. Key to the Committee's definition and solution of the environmental problem was the established leadership of the Public Health Service and the organization of an Environmental Health Center which would contain in addition to administrative elements a new Office of Environmental Health Services. This office would be:

> ... Independent of the divisional structure and with separate budgetary provision, consisting of scientific groups reporting to the scientist who is Director of the Office of Environmental Health Services. These groups would be specifically charged with the continuing responsibility for an overall purview of the entire field of environmental health, would include biological, physical, and social scientists as well as mathematicians, free to study basic problems in environmental health and

> undertake research on problems of common interest to the several operating units where desirable, while providing central services in mathematics, statistics, data processing, information storage and retrieval, instrumentation and analytical laboratory procedures, etc., and providing advice and consultation to the Bureau of Environmental Health, with respect to the overall direction of research. (12-pg 9)

This new center was to be located in the Washington, D. C. area or in the "research triangle" of North Carolina.

USPHS organization in 1963 is given in figure 6. Note should be made of the proposal to reorganize two groups of divisions under the Bureau of State Services into two bureaus. In spite of these efforts by USPHS and HEW to upgrade environmental health to include water pollution control, conservationists and many congressmen grew convinced that the Public Health Service and the individual States could or would not properly resolve water pollution control problems. And indeed, it could not be effectively argued that the States who had primary responsibility for setting standards, applying laws, and enforcing measures within their boundaries had water pollution control measures well in hand in the nineteen-sixties. While pollution intensified, States' quality standards were in disaray, uncoordinated, or non-existent. Although individual statues generally provided some enforcement provision, States preferred persuasion. Of 42 States answering a 1959 questionnaire of the Chairman of the House Committee on Public Works, the following data on State water pollution control enforcement were obtained:

Authority to issue administrative orders to control water pollution:

5 States - no authority
8 had issued no orders
17 had issued less than 50
12 had issued 50 or more

Court Actions:

17 States - none
5 - 1 only
10 - 1 to 5
6 - 5 to 15
3 - more than 15
1 - unspecified (13 pg 97)

B. Creation of Federal Water Pollution Control Administration in HEW

This dismal record coupled with the reluctance of the Public Health Service actively and formally to enforce provisions of the Federal Water Pollution Act acted as a catalyst to the introduction of many bills to instigate positive assumption of the Federal Government's leadership role in water pollution control. USPHS did enjoy a relatively better record in stopping and controlling gross pollution through conference enforcement. However, this congressionally designed approach developed, at the request of the States, consumed an inordinate amount of time. In 1963 and 1964, Congress held hearings to consider additional amendments among which were provisions to create a separate Federal Water Pollution Control Administration directly under the control of the Secretary of Health, Education and Welfare.

In his 7 February, 1964 testimony before the House Committee on Public Works, Louis S. Clapper indicated that the National Wildlife Federation was in favor of establishing a new Federal Water Pollution Control Administration within Health, Education and Welfare and in transferring all functions of the Division of Water Supply and Pollution Control to it. In correlation of water research with other research, Mr. Clapper suggested that the Secretary coordinate research efforts between the USPHS and the new administration.

> At the very least, the water pollution control program must be given statutory status as a separate institute or bureau in the Public Health Service...we believe that water pollution control program merits greater emphasis than it has [had] in the past - and is presently receiving - in the Division status. As a separate Administration, it would receive this emphasis and the Public Health Service would be free to concentrate on matters of health, urgency of the problem demands that water be considered in its overall aspect as a resource - and not just from the viewpoint of health, important though it be.

C.R. Gutermuth, Wildlife Management Institute, in February 19, 1964 testimony criticized Federal agencies for not even remotely recognizing the policy "that cleansing polluted waters and preventing wastes from reaching streams and other waters in the future is a goal of the highest priority." Mr. Gutermuth names USPHS, the then administrator of the Federal Water pollution control program, the Corps of Engineers (for limiting water pollution control measures in the Potomac River Plan to merely flusing and for other things), trades, industry, and muncipalities as guilty of "contributing to the gross contamination of our nation's waters." Mr. Gutermuth continued in clear and devastating terms:

> We strongly believe that, in addition, the entire program - enforcement, research, construction grants, comprehensive planning, standards laboratories, and all of the other segments - should be kept together in a single administrative unit. Upgrading the program and keeping it together must have first priority. Fragmenting the program and assigning responsibility for its various parts to two or more supervisory units is not desirable. Achieving and maintaining productive relationships between program functions is a difficult and never-ending task even in a closely coordinated administrative unit. Splitting program responsibility would create the perfect atmosphere for confusion, duplication, friction, and inertia...

> Conservationists do not believe that the Federal water pollution control program has been pressed vigorously enough under the administration of the Public Health Service, which is more interested in medical matters. In statements and resolutions extending over the past several years, conservationists have deplored the inability of Public Health Service to move promptly and firmly in combating water pollution. Enforcement has been slow, timid, or lacking. Research and demonstration projects, training grants and fellowships, and practically all aspects of the program reflect the agency's cautiousness, its lack of understanding, and its preoccupation with public health matters.
>
> The Public Health Service thinks mainly in terms of measles, whooping cough, and other diseases--not in terms of abundant water resources and of supply and demand for uses of all kinds. As long as disease outbreaks are avoided, it appears to make little difference to the medicos if streams flow forever foul, tainted, and stained, unsuited for agriculture, useless for cities and factories without costly and complicated treatment, unfit for recreation, fish and wildlife, and other uses. I say these things not in harshness, Mr. Chairman. The medical profession, by training and outlook, is geared for disease control, not water pollution abatement.
>
> Water pollution abatement always has been in HEW's seventh subbasement, and conservationists are gratified that the Congress is going to elevate the program to its rightful position. We strongly urge that this be done. Pollution control rates full partnership with flood control, navigation, irrigation, soil conservation, forestry, and other basic and essential watershed-oriented purposes. Elevating this vital program to administrative status where it can function on a par with other resources considerations constitutes one of the most significant steps that can be taken by this Congress. Should the Congress decide to keep the program in the Public Health Service--and we hope that this will not be its recommendation--conservationists urge that Congress to make clear that water pollution control will forever be removed from any plan to consolidate several Public Health Service programs into the proposed new Bureau of Environmental Health. Water pollution has been involved in the proposed reorganization by some of the PHS administrators. The effect of such a reorganization, if accomplished, would be to bury water pollution control even deeper in the Public Health Service's medically dominated bureaucracy. The effect on the program would be near disastrous. (Emphasis provided)*

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*Perhaps this provides the reason for the muted response of the Conservation Agencies on the proposed reorganization Plan No. 2, 1966 (see page 29).

Those in favor of the Public Health Service retaining authority for the Federal water pollution control program included the Association of State and Interstate Water Pollution Control Administrators, Water Pollution Control Federation, Council of State Governments, Mississippi Valley Association, Interstate Sanitation Commission, Ohio River Valley Water Sanitation Commission, Manufacturing Chemists Association, and others. The gist of these opposing arguments was that an establishment of a new agency would not be in the best interests of the nation, since it would depart from the cooperative approach between industry, and Federal, State, and local governments developed by the Public Health Service. It was argued that protection of health would continue to be an important objective of water pollution control, that a change of its administration would result in the loss of many exceptional technicians and disrupt valuable working relationships with State water pollution control agencies, and that new provisions of Federal control would encroach upon the States' authority to establish their own standards of water quality.

Senator John Sherman Cooper argued in clear terms against the proposed investment of authority to establish water quality standards in the Secretary, HEW. In individual views (Senate Report No. 10, 89th Congress, 1st Session), he pointed out that the Senate Public Works Subcommittees heard no governors and that "the majority of the representatives of State agencies who testified [eleven], opposed the water quality standards of the bill." In addition, governors and State water pollution control agencies who testified before the House Committee almost unanimously opposed the water quality standards section.

James M. Quigley, Assistant Secretary, HEW, and chairman of the Water Pollution Control Advisory Board in 10 December 1963 testimony presented a resolution of the Advisory Board strongly urging that the water pollution control program be retained within HEW and that a separate administrative agency be established by HEW or by Congress to administer it. Secretary Quigley declined to either condemn or praise the past performance of USPHS in water pollution control. He took the position that Congress should allow the Secretary of HEW the necessary flexibility to organize his programs for which he is responsible in any manner he felt appropriate. In effect, Congress should not freeze water pollution control into any administrative arrangement and relieve the Secretary of his perogatives. It is not clear how Secretary Quigley reconciled his position between his loyalty to HEW Secretary Celebrezze and his functions as chairman of the Water Pollution Control Advisory Board.

Congressman John D. Dingell summarized the mood of a large segment of Congress in his 5 December 1963 statement and testimony. He pictured the USPHS attitude towards water pollution as lackadaisical, its administration and budgetary stewardship of the program as a series of failures (some of which were whitewashed), and its water pollution abatement record sorry. "It includes malfeasance, misfeasance, diversion of funds, and clearly the most indifferent and unconcerned attitude to our most pressing resource problem." He also directed criticism at the lack of water pollution research by pointing out that the Taft Center at Cincinnati was jammed with other research including air pollution, radiological health, environmental engineering, food protection, and occupational health.

Senator Muskie, a sponsor of one of the considered bills, took a more concilatory view towards USPHS and merely damned it with faint praise; however his arguments and solutions were similar.

> The Senate believes that the Public Health Service has an important role to play in water pollution control as it relates to environmental health. But we are convinced that the problem of water pollution is much broader than health, and much more important than its position in the organizational structure the Public Health Service now implies.

The result was Public Law 89-234 (The Water Quality Act of 1965) which created a Federal Water Pollution Control Administration (FWPCA) within HEW. FWPCA assumed a position equal to USPHS under the Secretary.

Besides creating the FWPCA, P.L. 89-234 gave the States the opportunity to develop individual water quality standards (for drinking water, propagation of fish and wildlife, recreation, agriculture, industry, etc.) on their interstate navigable waters before June 30, 1967. It also increased the financial aid program; extended it to include research and development to control pollution from stormwater and combined sewer overflows; established a meaningful national goal "for the prevention, control, and abatement of water pollution;" and, strengthened enforcement actions in shellfish pollution.

C. FWPCA Moves to the Department of the Interior

The HEW Secretary directed FWPCA operations for a short period of time. On February 28, 1966, the President submitted to the Congress his Reorganization Plan No. 2 of 1966 which transferred all water pollution control activities other than those relating directly to public health from HEW to the Department of the Interior. Specifically, FWPCA and functions relating to the Water Pollution Control Advisory Board were to be transferred on May 10, 1966. However, the HEW Secretary was to become an additional member of this latter board. The administration's rationale for the reorganization and the reshaping of the management structure included the unification and coordination of the water pollution attack; the need for new and creative Federal, State, local, and private partnerships; and the requirement for program execution as "an integral part of comprehensive planning for the development of river basins." In nominating the Department of the Interior as the logical agency to coordinate Federal water pollution control activities, President Johnson stated that Interior:

a. Had historically managed and developed the Nation's water resources;

b. Administers the Water Resources Research Act;

c. Chairs the Water Resources Council established by the Water Resources Planning Act of 1965;

d. Accomplished water research and development; and

e. "Plans, constructs, and operates multiple-purpose water and relative land resources projects."

In the meantime, the Department of the Interior had, for several preceeding years, issued a series of publications with respect to the environment, man, and pollution. There appeared to be a skillful maneuvering to establish an identity with water pollution control. Between this effort, the close relationship of Secretary Udall and the President on Conservation matters and the conflicts in HEW the reorganization proposal appeared most timely.

During March, April, and May of 1966, Senate and House Subcommittees held hearings on President Johnson's proposed reorganization and identified several issues.

While the 1965 Act elevated water pollution control to a status equal to that of Public Health under HEW, Senators Muskie and Ribicoff argued that this new proposal did not address the issue of functional consolidation and actually tended to fragment rather than to consolidate water pollution control functions. As an example, HUD and Agriculture's sewer programs remained in those departments and only about 90% of HEW's water pollution control programs were to move to Interior. USPHS programs with overlapping pollution control functions such as food, drinking water and sanitation, health research, and the Division of Radiological Health remained behind in HEW.

Furthermore, since Interior through FWPCA would initiate investigation when water problems pertained to public health, FWPCA would be required to develop a public health capability. Such an augmentation would incur duplication costs in research, time, and personnel. In addition to the issue of drinking water, water pollution could not be separated from public health when fish or other water life entered the human food chain. Representative Cramer argued that the Surgeon General was administratively eliminated from participating in the water pollution public health interface except through the Secretary of HEW who would theoretically maintain proper visibility through participation as an augumented member of the Water Pollution Control Advisory Board. Secretary Gardner's capability to properly maintain cognizance through membership on this board was seriously questioned in that he already maintained membership in more than 25 other separate boards and committees. Since drinking water and other public health standards were lower than for certain industrial and conservation uses, it was argued both pro and con that the move to Interior signaled a shift of emphasis from public health to resources control.

Senators Ribicoff and Muskie questioned the timing of the reorganization. They noted the bitter struggle to establish a separate FWPCA less than four months ago and the insufficient time adequately test to its effectiveness as administered by HEW. It was also noted that major reorganizational changes invariably cause program delays.

Many officers of the Public Health chose to leave the water pollution control field rather than to lose commissioned status. These men were not affluent and had devoted their lives to building a career within Public Health. Retirement, medical benefits, and other privileges were an understood and integral part of their commitment to society. In effect these men were being asked to give up their careers; over 300 commissioned officers had to make this career pattern choice as a result of the 1965 act. About one-third refused to accept Civil Service appointments and declined to leave HEW and the Public Health Service or resigned from government service. It was reported at the time that another third were undecided. Those who resigned had no difficulty in obtaining positions of influence with States, municipalities, or other Federal agencies. Personnel departures caused additional and serious doubts as to whether the water pollution control program could be transferred without breaking stride. For example defections decimated leadership positions at the Taft Environmental Health Center at Cincinnati.

It is difficult to examine and analyze adequately bureaucratic motives in this reorganization proposal. Those that favored a consolidation of all agencies having water functions considered this move to Interior as a necessary and incremental first step towards the development of a Department of Conservation and Natural Resources. In his 7 April 1966 statement, Senator Moss gave credence to this view by stating:

> I have long been advocating such a move, and it is an important part of the bill I introduced last session to establish a Department of Natural Resources which would absorb all water activities of the Department of the Interior and pull together all other important water activities from elsewhere in the Federal Government so they could be managed on a coordinated basis. I consider Reorganization Plan No. 2 as the first step toward putting my proposal into operation.
>
> This reorganization plan is plain commonsense. It would place in the hands of one department--one administrator--the responsibility for both pollution abatement and water use and conservation. One is tied inextricably to the other.
>
> Last session we passed legislation to provide for water resource development planning on a river basin basis.
>
> This program is being administered by the Department of the Interior. President Johnson has now asked us "to clean and

> preserve entire river basins from their sources to their mouths." Certainly we can plan better both for the comprehensive development of the water resources of any river basin and for control of pollution in them if both activities are centered in the same department. In fact, pollution control is one of the most important aspects of water management--in some river basins of the country it is the greatest part of the problem.

In his remarks, Secretary Udall stated that it had been his experience that "the more you have centralization, the better and the more you can have all the threads under one secretary, the more decisions can be made." Yet in answer to objections to Interior's assumption of public health responsibilities in water pollution, Secretary Udall stated that the only change from the 1965 Act was that the FWPCA would be moved intact to Interior. To answer criticism leveled at the reorganization's lack of inclusiveness, executive proponents of the proposal argued that nothing in our complex system of government could ever be completely unified without "creating chaos and complete overlapping and duplication throughout the executive branch structure." A dialogue from the Senate hearings that addressed the consolidation issue follows:

> Senator Muskie. What you are talking about under this reorganization plan is bringing your other interests in water together with this interest in water, but you are not consolidating, under this reorganization plan, you are not consolidating programs dealing with water pollution control and abatement.
>
> Secretary Udall. I think that this reorganization would put in one department for the first time in the history of the country most of the water conservation, the water quality, water pollution control activities in the Federal Government, all of them in one department.
>
> Senator Muskie. That is another question. My question is, "You are not consolidating or bringing together the water pollution control programs?"
>
> Secretary Udall. I think that the reorganization plan has that precise result.
>
> Senator Muskie. You are not bringing in the HUD program, you are not bringing in the agriculture program, you are not bringing in all of HEW's program, and you have none of your own to add to those you are bringing over from HEW on water pollution control and abatement. You have other water interests, granted. The staff of the committee has given us a very comprehensive view of what you do and what HEW does in the field of water. This is all I am trying to focus on. Your argument isn't that you are consolidating the water pollution control

activities of the Government, but that you are saying that this is a good thing and that is the case you are going to make.

But I don't think you have got the argument and I don't think you ought to try to pretend to have the argument that this effectuates a consolidation of the water pollution control programs, because I don't see that it does one iota.

Secretary Udall. Senator, I think that water is now so complex a subject that Agriculture must always have certain responsibilities in this field. I think HUD should have some responsibilities, I think Public Health Service should have some responsibilities.

Senator Muskie. Now you are making my argument.

Secretary Udall. The subject is just too complex. But in terms of cleaning up the rivers of this country, I don't think we can ever really tackle the problem head on until we give one Cabinet officer the main big responsibility, and this is precisely about that simple. This is what the President has in mind. If the Congress doesn't want to do it, I might--we will just hobble along pulling and hauling as we go down the road.

Senator Muskie. My argument is that this is the wrong time, that we now, last year, achieved the consolidation of the water pollution control programs in one place. We have written into law certain new concepts, new policies that have not yet been implemented, that have not been spelled out in regulations, in guidelines for the assistance of the States and so on.

This part of the water problem is an urban metropolitan one. Interior has never been involved to any great degree in urban metropolitan problems. So my belief was, and it still is, that we should let that aspect of the program generate the momentum necessary to achieve results.

Then you can see what further changes might be necessary. It might have been this very one in the organization of our overall water programs. I don't have any fixed opinion that this should not be in your jurisdiction. As a matter of fact, your leadership of the Department is a very strong one for supporting the reorganization plan. And I mean no disrespect to Secretary Gardner who is involved with so many other programs. But I just felt now was the time to concentrate on what we started last year, in order to put together a really effective water pollution and abatement program based on the policies, the new policies and concepts within last year's law.

Now I think we have had considerable delay because of the reorganization plan and its consideration by the President. We have got a deadline. The States have until July 1, 1967, to develop water quality standards of their own on interstate streams.

They have had no guidance as yet from the new Water Pollution Control Administration, because of this reorganization. Because they have had no guidance as yet, we are beginning to hear the argument from them that that deadline should be extended.

Now such as extension, if they are able to bring up enough pressure here on the Hill to get it, will mean a delay in getting effective water quality standards on our interstate streams. We should have been using every minute of the time between the signing of the bill by the President and July 1, 1967, to give the States every chance, and no excuse for not acting within the time that they had available. Now they have got a little more than a year. I don't know how long it is going to take for the Department to develop the guidelines necessary for the States to act, and I would be willing to bet a dollar to a penny that they will be in here asking for an extension of that deadline next year, because they will say, "You didn't give us the tools with which to do this job." And if they get an extension, then we are going to have a further delay. That is why I was bothered.

Now my arguments to the White House failed, but my principal purpose was to try to persuade the President not to send up the plan. Now he has sent it, and having been a former Governor myself, it is my inclination to give the Chief Executive the right to reorganize his work in the ways that seem to make sense to him. If my reservations aren't shared by others, I will accept the verdict. But I wanted to make it a matter of record here that my concern was a real one. It was related to getting this new program off the ground and started. I am awfully fearful of further delays.

You know, Mr. Secretary, I know you know that once you have deposited this stuff in the streams, to get it out is a difficult chore.

We were in Germany together. I will never forget the use of the Emscher River in the Ruhr Valley. It once rose out of pure springs in the ground. I asked the Germans what was now the source of the stream. They said the sewers. It is a complete sewer today because somebody delayed too long in the past, and I don't like delay, and I think we are getting some. Some delays are already behind us and we can't do anything about it.

Secretary Udall. That is right. Senator, I want to give you some assurances on this because I know your strong feelings on it. As a matter of fact, I think what the executive needs in this field is the same crusading approach to this problem that you and a few others in the Congress have taken in the past.

> I want to assure you that if this reorganization is carried out, Commissioner Quigley and I have already had many discussions about this. We are already working on it, Secretary Gardner is working on it, but if the reorganization occurs every step will be taken to see that no case can be made for delay.
>
> I think we have delayed too long, and I want to make my own position clear on that. I think you are certainly right in terms of feeling that a quicker pace, a quicker tempo is needed in this whole program, one that will not enable those who are hanging back and who are dragging their heels to say "Well, we need to take further time and we are not ready to go ahead."
>
> I think that the administration should do everything possible to see to it that these excuses are not present.
>
> Senator Muskie. This is the one reassuring thing about this reorganization plan, your own dedication to it and the fact that you have more time than Secretary Gardner would have to devote to this program. I noted in your House testimony that you promised 25 per cent of your time.

In answering a later question as to whether reclamation would be incorporated with water pollution, Secretary Udall stated "[that] is a construction program, and I think this should be divorced by all means from water pollution."

Bureaucratic reorganizational logic was discussed in some detail. Although the Senate and House hearings contained no testimony from HUD, Agriculture, and USPHS representatives, it was apparent that some sort of accommodation and agency agreement had been made as to who would give up what to who. Under penetrating questions, witnesses were often hard put to adequately defend certain positions. As an example, the hearings failed to establish why there were no obstacles to coordinate all water pollution factors in the new reorganization and why there were extreme coordination obstacles in the present arrangement which had greater concentration of functions.

Representative James Cleveland stated that this action constituted the third major shake-up in water pollution control in five years and listed four arguments against its approval:

a. Premature. HEW had only administered the program less than four months.

b. Shift in emphasis from public health to resource preservation. Interior is Western-oriented, has limited urban experience, possesses minimal experience in enforcement, and contains agencies that represent the worst polluters of the nation.

c. Shift in congressional emphasis by fiat. Congress in approving the Water Quality Act of 1965 "stated that the administration will rest where it properly belongs - in the hands of the Secretary of Health, Education and Welfare' ...What, Gentlemen, is coming over Congress? If the Congress speaks with that much certainty, unanimously on that subject and less than one year later the Executive, by fiat, or by reorganization plan reverses what we have done unanimously, it raises a question as far as I am concerned why we even bother having a Congress."

d. Chaos. "...the effect of the transfer from HEW to Interior on the commissioned officers of the Public Health Service assigned to the Federal Water Pollution Control Administration may be damaging to morale and cause heavy and damaging loss of such personnel to the administration."

Senator Ribicoff delineated several points that concerned him and other members of his subcommittee:

a. Lack of effort to consolidate water programs.

b. Splitup of the HEW Program.

c. Enforcement inexperience in Interior.

d. Reluctance of USPHS Commissioned officers.

e. Conflict of interests within Interior.

f. Western and non-eastern, non-industrial orientation of Interior.

g. Possibility of priority downgrading.

h. Inconsistent relationships and functions with the States.

i. Delay.

j. Requirement to develop a new regional system.

Senator Muskie recognized the importance of the views of various wildlife and conservation organizations. However, in contrast to the amount of interest displayed by these groups during hearings on the 1965 amendment, few took advantage of the opportunity to express their views as a matter of record. None adamantly championed the move to Interior and most couched their support in terms like "we do not oppose this reorganization."

Those giving general support did so with reservations that included timing, consideration and enticement of USPHS commissioned officers, the possibility of conflict of interests within Interior, and program delays. Not surprisingly, the American Public Health Association recommended the FWPCA remain in HEW.

There were adequate and legitimate reasons on which Congress could base disapproval for the President's plan. Several reasons precluded such an action. President Johnson wanted the plan and enjoyed overwhelming congressional support due to the Democratic landslide victories in the 1964 elections. Congressmen, and to a lesser degree conservationists, who advocated a Department of Conservation and Natural Resources considered the reorganization as an incremental step towards its realization. Secretary Udall enjoyed wide support for his energetic and enthusiastic dedication to the causes of conservation. Dr. Spencer M. Smith, Jr., Secretary, Citizens Committee on Natural Resources wrote the House subcommittee in fairly typical terms that "if we could be assured, therefore, that Secretray Udall would continue in this position of responsibility for the next two or three decades, most of our fears would be allayed."

The proposed organization for FWPCA upon its movement to Interior is shown in figure 7.

Congress may not amend an executive reorganizational proposal and in effect must assume a position of overall approval or disapproval - all or nothing. However, Congress may choose to take no position and in that case the reorganization plan becomes effective 60 days after its submission to Congress. To stop reorganization implementation, either house must adopt a resolution disapproving the executive proposal within the required time limit. Congress did not block this proposal and FWPCA moved from HEW to the Department of the Interior.

D. Further Consolidation Within Interior

During July hearings on Reorganization Plan No. 2 of 1966, Secretary Udall had made clear his desire, among other reasons, to bring Water Pollution Control within his Department as a means of combining the responsibility he already had under the 1965 Water Resources Planning Act. This Act had created the Federal Water Resources Council as a top level coordinating agency and provided encouragement for river basin planning but did not address pollution. The Water Quality Act of 1965 which was the then current amendment to the Water Pollution Control Act did not address basin planning and controlling agencies. Briefly the motives of the Administration were to bring the two 1965 Acts into tune with each other to clean up the nation's rivers.

During his appearance before the House Committee on Public Works Interior Secretary Udall outlined four basic requirements of the clean rivers approach:

a. Establish quality standards that are consistent with the 1965 act for all waters of the nation's river basins.

b. Develop water pollution control plans by coordinated Federal, State, and local actions.

c. Design and establish permanent river basin organization (s) around an appropriate lake or coastal city to plan and coordinate pollution control activities.

d. Require State and local contributions to finance necessary waste treatment facilities.

Both the Senate and the House had some difficulties with the approach and proposed language. The Administration inadequately performed its homework; both Secretary Udall and FWPCA Commissioner Quigley made concessions that the language was at places unclear or vague and would require some extensive rewrite. Substantive problems concerned Federal vs. State relations, the amount of authority vested in the Secretary of the Interior, timing (incomplete implementation of the 1965 Act, recent FWPCA shake-ups, etc.), effectiveness of incentives for State and local financial participation, and agency proliferation.

In the area of Federal vs. State relations, there was a search for a middle ground where neither a State governor nor the Secretary of the Interior could exercise a unilateral veto on pollution control plans or river basin organizations. Both sides of the aisle objected to the provision for the Secretary "to authorize a program in selected river basins." Congressman Dingell noted it would be unfair to favor some basins if there were insufficient funds to clean up all river basins at the same time. Several Republicans objected to the transfer of Congressional prerogatives to the Executive.

The hearings on the 1966 act provided a bonus in the form of insight into two additional areas--additional reorganization and the role of the Public Health Service. In answer to an allegation by Mr. Jack Kinney, Ann Arbor Professional Engineer, that there would soon be another reorganization proposal "that would move the TVA and the civilian functions of the Corps of Engineers over to Interior," Congressman Wright stated that the House Committee on Government Operations had no intention of destroying existing programs and agencies. HEW Secretary Gardner delineated the functions of the Public Health Service vis-a-vis FWPCA and the Department of the Interior that the administration, up to this time, had not enumerated or defined. Secretary Gardner listed the following specific areas:

1. We will conduct the research necessary to define the health effects of water pollution. This will involve various parts of the Public Health Service, including the proposed National Environmental Health Sciences Center in North Carolina, the Communicable Disease Center in Atlanta, the National Institutes of Health, as well as other laboratory resources. It also will involve the use of research grants and contracts.

2. We will participate in health surveillance of water supplies to determine the presence of such contaminants as disease-producing organisms, pesticides and other chemicals, and

radioactive substances. This will involve cooperative arrangements among several PHS divisions and offices, as well as with Federal, State and local health agencies.

3. We will carry out epidemiological investigations of specific water-borne disease outbreaks. The Epidemic Intelligence Service in our Communicable Disease Center is the primary focus for this activity.

4. We will provide technical assistance and training to assist State and local health agencies and the waterworks industry to continue to assure this Nation the world's safest water supplies. These activities while centered in our Division of Environmental Engineering and Food Protection, also involve other organizational units.

The Clean Water Restoration Act of 1966 (P.L. 89-753) did not authorize demonstration cleanups for "selected" rivers. It did, however, encourage comprehensive basin wide pollution control planning by providing for the Interior Secretary to "grant up to 50% of the expense of a planning agency for not more than 3 years" at the "request of a state governor or a majority of governors if more than one state is involved." (6 pg 655) It also authorized pollution studies of estuaries and estuarine zones. Significantly Congress recognized that pollution control would cost a great deal of money and removed dollar limitations on projects and authorized Federal grants of up to 50% of project construction costs provided requesting States met certain conditions. In water pollution control research, development, and demonstration, Federal grants were authorized in amounts up to 75% of the cost of State projects and up to 70% for industrial projects with demonstrated industry-wide application. In coordination with the Coast Guard and the Corps of Engineers, the Secretary of the Interior was to study the effects of water pollution in all navigable waters by watercraft. Also he gained the enforcement responsibilities of the Oil Pollution Act of 1924 from the Corps of Engineers. Federal water pollution enforcement provisions continued to be limited to interstate and coastal waters.

Meanwhile the Public Health Service played reorganizational musical chairs to meet its environmental health obligations. In 1968, the Environmental Health Sciences Division of the Consumer Protection and Environmental Protection Agency (now again the Environmental Health Service and in 1970 again under reorganization) became the National Institute of Environmental Health Sciences (NIEHS) within the National Institute of Health. The same year, Dr. Kotin, NIEHS Director, had requested the formation of an Environmental Health Services Advisory Committee of 50 experts to recommend guidance on research planning. Their report published in reference 14 offered research recommendations to other agencies (Consumer Protection and Environmental Health Service, Federal Water Quality Administration, Labor, Transportation, HUD, Agriculture, and Defense) as well.

In enforcement, lack of authority severely restricted FWPCA in its operations. The usual procedure was to hold conferences (public hearings) between participants and offending and offended States. In research, FWPCA continued research at the Technical Advisory Center in Cincinnati and constructed five additional laboratories to provide service and research in pesticides, bacteriology, animal wastes, and thermal pollution.

The Water Quality Improvement Act of 1970 (84 Stat. 113) created the Office of Environmental Quality to assist the Council of Environmental Quality and contained provisions concerning oil pollution from any source, other types of pollution caused by vessel discharges, the discharge of dangerous materials into waters, and permits and licenses. In addition, this act renamed the FWPCA as the Federal Water Quality Administration (FWQA) and thus took a positive attitude towards improving and maintaining the quality of water rather than opposing water pollution. FWQA organization under the Department of the Interior is represented in figure 8. FWQA regional divisions are shown in figure 9.

On December 2, 1970, FWQA became a major portion of the Environmental Protection Agency directly under the President.

VIII DEVELOPMENT OF THE ENVIRONMENTAL PROTECTION AGENCY

In conducting hearings on Reorganization Plan No. 3 of 1970 (EPA), both Houses endorsed the objectives of the proposal; however, the Senate appeared more sympathetic to the implementation method than did the House of Representatives.

In his testimony before the Senate Subcommittee on Executive Reorganization and Government Research, Senator Muskie noted that "the President proposed to do by reorganization what I had proposed to do by legislation." The Muskie bill (Senate 3677) would have created an environmental quality administration to perform duties as the watchdog to protect the environment. Major differences between the legislative and administrative approaches were the degree of inclusiveness. Noted omissions from the reorganization plan were the noise control program from the Department of Transportation, sewer construction grant programs from the Department of Housing and Urban Development and the Department of Agriculture, the water monitoring capabilities of the U.S. Geological Survey (Interior), and the Environmental Science Services Administration (ESSA) (Commerce). ESSA provides important environmental data and consists of the Weather Bureau, the Environmental Data Service, the National Environmental Satellite Service, the Coast and Geodetic Survey, and the Institute for Environmental Research.

In opting for organizational stability and environmental regulatory autonomy, Senator Muskie differed sharply from those who proposed the inclusion of an environmental agency within a separate department such as Natural Resources and Conservation. Such an arrangement would cause a major conflict of interest between those promoting and developing natural resources and those charged with protecting and conserving them. In effect, it would bed down the foxes with the hens. Muskie noted that conservation is not identical to environmental protection even though efficient conservation measures help to prevent environmental deterioation. Furthermore, man is the primary recipient of environmental protection and conservationists have been too closely identified with natural resources out in "Marlboro Country" far removed from population centers.

Senator Moss, the perennial champion for the creation of a separate Department of Natural Resources and the Environment, endorsed EPA as a short step towards this new department.

Subcommittee Chairman Ribicoff expressed the mood of the Senate by endorsing Reorganization Plan No. 3 of 1970 and by focusing attention on the possible fadishness of environmental concern. He also noted the link between population, production, and pollution. There is danger of:

> A new kind of pollution - a pollution of broken promises. I fear we may become so saturated with oratory that we

> will grow impatient, lose interest, and go on to another cause. ...We wonder whether people will accept the major changes in our national life which will be necessary if we are to cleanse the environment. Up to now, America's answer to the pollution problem has been to overpower it with technology and try to buy our way out with money. But this will gain us only a standoff with nature... There must be basic changes in the goals and values of society. ...So long as our population and production increase, we will never reduce pollution. Inevitably, more people demand more goals, which results in more pollution.
>
> So, we will need a new economics which rewards the man who preserves more, not only the man who produces more. And we will need a new environmental ethic, one which emphasizes the dependence of man on nature, not his domination over it.

The Senate introduced no resolution opposing EPA organization.

In hearings before a House Subcommittee of the Committee on Government Operations, the atmosphere was more strained than it had been in the Senate. Generally the subcommittee plowed the same ground but made the furrows deeper. Chairman Blatnik appeared to be particularly miffed that Congress, except for a few limited contacts, was not consulted in the proposed conservation and environmental programs.

> You [Roy L. Ash] stated that your staff interviewed 180 persons, including top officials of all Government programs examined, former Government officials, public administration experts, and economists. The staff also interviewed a number of regional, State, and local pollution control officials. We made one point yesterday that this Congress began 17 years ago to work on water pollution, long before any governmental agency was involved, and built it up to the $1.2 billion program it is today. Not one single member of the top staff people of either the House or Senate Committees that I have personally checked on was consulted, except perhaps a very brief and perfunctory discussion in one or two instances. Not one knowledgeable member who knows the legislative process, who knows the contacts that we have had with the citizens, with the individual conservation groups, with industry people, has been contacted in this instance.
>
> Is there any reason for that?

In 1963 in House hearings on his and other bills that proposed to form a separate FWPCA directly under HEW, Congressman Dingell stated:

> ...I got so disgusted with the Public Health Service Administration of this [Water Pollution Control] that I indroduce[d] legislation to move water pollution abatement activities over to the Department of the Interior. But I would say that if we can get the statute which we have before the Committee at this time enacted into law, I do not think that would be necessary. I think we would have an adequate operation and one which would protect the public interest. ...I do not think Interior would do a better job than an upgraded agency in HEW.

Apparently Congressman Dingell found it necessary to change his mind for in 1970 at EPA hearings he stated, "I have had in for a number of years, and I am certain the administration is well aware of it, legislation which would move all of these water pollution grant programs to one agency, the Department of the Interior."

As Chairman of a House Subcommittee on Fisheries and Wildlife Conservation, Congressman Dingell spoke with no small base of knowledge and bias as he castigated reorganizational proposals 3 and 4 in sometimes abrasive terms. He criticized take-it-or-leave-it proposals where Congress must quickly digest reorganization proposals without sufficient chewing and specifically noted the lack of executive coordination with knowledgeable members in this case. Confusion, loss of inertia, and long periods of total inaction habitually follow major reorganization efforts. EPA will lack a cabinet spokesman and will not control many agencies and functions directly concerning the environment, however Congressman Dingell noted later that "it is absolutely impossible in a Government this size to put everything that deals with any one thing in one place without literally destroying or decimating or hazarding any number of related other matters that deal closely with the same problems." He argued adroitly that environmental protection could be obtained within the framework of existing agencies and posed a question that might have been asked more appropriately during deliberations to separate water pollution control from the Public Health Service - "How much better would it be, Mr. Chairman, if we were to see to it that the agencies had proper leadership, proper coordination, proper funding, and determination from the top that the agency should function." Congressman Dingell sums up his testimony as follows:

> It is my hope that you and your committee will recommend disapproval of these two reorganization plans and that, at an early time, you move to see that the House summarily rejects them, as you should, since they are not in the public interest and do not solve the problems. Then we can begin to move in concert with the White House, if the White House wants to, toward a legislative reorganization of the Government's affairs by enabling the Congress to participate in that action through the establishment of a Department of Natural Resources and a Department of Environment. In this way, appropriate opportunity will

> be afforded all persons, and there are large numbers of persons, conservation organizations, Members of Congress, Senate, people who have been studying and working on these matters, people in the universities, to participate in the reorganization plans.
>
> I would point out that only people that I know of involved in one of the plans are the members of the Ash Commission.
>
> Mr. Chairman, I would be happy to read, if you wish, a little ad hominem. I would be pleased to read some of the comments appearing in the press and in the financial world about Mr. Ash's administration of Litton Industries which has fallen on rough days of late. I would say if he has the talent he is supposed to have he would direct his talents to Litton Industries rather than screwing up the affairs of the Federal Government which he has so clearly done here.
>
> With those remarks, Mr. Chairman, I would repeat that this body the House of Representatives and the Congress, should be consulted in these matters. We should have legislation which would enable everybody to participate, instead of disgruntled industrialists operating behind closed doors, so that we can come up with programs which are really going to reflect national need and which will conclude the reorganization of the Government instead of setting up an interminable period of organization which will accomplish nothing.

Congress held simultaneous hearings on EPA and the creation of a National Oceanographic and Atmospheric Administration (NOAA). Spokesman for conservation organizations generally vented their displeasure against NOAA and endorsed EPA with widely varying degrees of enthusiasm. All were sympathetic to EPA objectives and supported its concept. Reservations included lack of cabinet rank, omission of noise abatement and sewer grant programs, the interruption estimated at more than 18 months, and the illusion that EPA will obtain funds as readily as such glamor agencies as NASA. The advantages noted included the coordinated effort at the defense of the environment, the discontinuance of the necessity to compete for funds within Interior, and the elimation of internal conflicts of interest.

Health associations noted that environmental protection could not be separated from Public Health and advocated a separate Department of Health and Environments where human health would be the main orientation.

The American Water Works Association voiced concern that water supply might be completely submerged and lost in the pollution control effort and made a recommendation completely analogous to arguments of conservationists when the Public Health Service managed water pollution control functions. The Association proposed a separate and identifiable water supply function!

Farming and agricultural interests proposed that agricultural chemical registration functions remain in the Department of Agriculture since these items might be identified solely as pollutants rather than tools of production.

Wildlife management and sporting interests supported EPA but noted the necessity for increased funding and specific memoranda of understanding between EPA and the myriad of interested agencies.

Russell Train, Chairman, Council of Environmental Quality, and Roy L. Ash, Chairman, President's Advisory Council on Executive Organization effectively presented the administration's argument. Although probably recognizing a tactical blunder in not coordinating with Chairman Blatnik, Mr. Ash indicated that his staff had interviewed about 180 top officials of examined government programs and also "a number of regional, State, and local pollution control officials." These two spokesmen explained the functions of the new agency, its organization, relationships to the Council of Environmental Quality and other agencies and departments, and delineated the objectives of reorganization as:

> Research and standard-setting based on a comprehensive view of the individual's health, the planet's ecology, the economic costs of pollution and its abatement, considering also the benefits to health and well-being that may accrue from the products, processes, or activities that give rise to pollution.
>
> Formulation of coordinated policy for pollution control, taking into account all media in which a particular pollutant may appear.
>
> Recognition of new environmental problems and development of new programs to meet them.
>
> Integration of pollution control and enforcement so that we do not create new problems in the process of controlling existing ones.
>
> Simplification of relations for State and local governments by reducing the number of Federal agencies with which they must deal and clearly identifying their responsibilities.
>
> Provision of a unified U.S. responsibility to work with other governments as pollution problems become a matter for international concern, agreements, and action.

Clarification of the responsibility of private industry by providing consistent standards and a single enforcement agency.

Figure 10 shows a summary of estimated personnel and funding of EPA submitted by Mr. Train to Chairman Blatnik. Note that FWQA provides nearly half the total personnel and almost 90% of the obligated funds of EPA.

Dwight A. Ink, Assistant Director, Office of Management and Budget, submitted the draft functional chart in figure 11 to Chairman Blatnik. In answer to subcommittee questions to Mr. Ash as to why certain programs were omitted in EPA, Mr. Ink also submitted the list of functions with comments found in letter at appendix 1.

On September 28, 1970, by voice vote, the House of Representatives rejected House resolution 1299, in disapproval of Reorganization Plan No. 3 of 1970. No Senator introduced a similar resolution. Thus, in effect, Congress approved the creation of the Environmental Protection Agency.

IX EPILOGUE

Perhaps this section should be more appropriately entitled "Prologue" for an environmental protection agency has yet to successfully tackle the environmental question. However, one must add that such agencies have repeatedly been interrupted by reorganizations. The jury is out and will continue to be out until some semblance of order, unity of purpose, and enforcement of pollution standards become rote. Senator Moss identified three historical waves of conservation - the administrations of Theodore Roosevelt, Franklin Roosevelt, and Kennedy - Johnson. There could be a fourth and a more successful one - certainly more critical - if Administrator Ruckelshaus energetically and deliberately pursues EPA's standards and enforcement programs.

The nation's pollution control efforts have come full circle from consolidation within the Public Health Service; to fragmentation among HEW, Interior, Agriculture, Commerce, AEC, and the Federal Radiation Council; and, back to consolidation within the Environmental Protection Agency. Nonetheless, EPA represents the greatest consolidation of environmental functions since the Water Quality Act of 1965 established the FWPCA, painfully wrenched it from USPHS, and placed it on an equal bureaucratic level with its former boss in HEW.

EPA has many advantages but there are also disadvantages among which is the uncertainty that each environmental function will remain separate and identifiable. As long as government attempts to solve the nation's problems, there will be organizational changes. Changes usually accomodate the views of the politically stronger and not necessarily those that might have correctly assessed a particular problem. Since the reorganizational process will be repeated again and again, it is important for all of us, and especially the politically affluent, to learn from past mistakes. Reorganizational struggles may well center, for example, around consolidating water planning and construction agencies; one can hope for a more deliberate and rational resolution to that issue.

A. Inefficiency and Time Losses Through Reorganization

What has this tortuous and circuitous organizational approach cost in terms of time? It is estimated that five to eight years have been lost to environmental programs through reorganizations. Even under the most favorable climate during the move from HEW to Interior in 1966, FWPCA lost an estimated 1 1/2 years of impetus. The question then arises, why do we do it? The answer could be oversimplified and stated "because of the system." The system encompasses the Federal-State-local interfaces and politics, the interplay between pressure groups and lobbies, partisan interests, and bureaucratic competition. These forces which seek constant accomodation are not new. Federalist problems from 1789 to 1801 included them among six identifiable areas: the President and his cabinet, Congressional vs. executive power, interdepartmental relations, Civil Service, degree of legislative control of appropriations, and Federal-State relations.

Is our status today a natural evolution from where we were yesterday? Unfortunately, the answer is probably yes in light of the mood of the times, the adamant opposition of conservationists to Public Health's continued control of the water pollution control program, and the advocacy of those wishing a Department of Conservation and Natural Resources.

During the New Deal, the Federal Government experimented with ad hoc organizations and approaches, tried many suggestions, and left a legacy of pluralism. New Deal legislators were not radical (they amended the Constitution only once by repealing prohibition) but they did condition people to expect the government to energetically respond to crises regardless of whether or not that response was only in the form of an experimental ad hoc arrangement. Unfortunately USPHS failed to recognize there was a crisis.

Troubles of the Public Health Service in this area precipitated all at once. Prior to 1948 (and also afterwards) there was neither the national budget nor the interest in water pollution. Funds came slowly and intermittently; there were no strong statutes by which to enforce pollution control and to punish violators. When Congress strenghtened the 1948 Act by a series of amendments, USPHS top administrators became more concerned in personal health problems rather than health related matters, downgraded water pollution even further, and exhibited a concern over overt enforcement actions. Under extreme conservation pressures, the authority for Federal water pollution control was given to HEW in 1961; however, that Department also failed to recognize or chose to ignore the booming environmental issue.

Initially, President Johnson enjoyed an amazingly successful legislative record, but increasing Congressional resistance indicated there would be rougher days after the 1966 elections. The tenor of the executive strategy was to make hay while the political sun shone. Conservationists were vocal and strong; significantly Secretary Udall, a strong conservationist, headed the Department of the Interior. In vigorously advocating the creation of a separate Federal Water Pollution Control Administration, conservationists oversold their case in attempting to prod USPHS into action by attacking their record. This, of course, reflected on HEW who had direct authority over the program. Such actions suited the motives of those wishing to move water pollution control functions to Interior and to subsequently create a separate Department of Conservation.

President Johnson's proposal to transfer FWPCA to the Department of the Interior preempted conservationists. They remained relatively muted but did offer unusually short statements to Congressional subcommittees urging Secretary Udall to ensure FWPCA freedom of action, separate identification, clear channels to the top, and strong enforcement actions. Several noted concern that while the problem in HEW was disinterest, the problem in the Department was likely to be the opposite and involve great conflicts of interest.

Even under favorable circumstances, reorganization causes slippages of personnel, on-going programs and growth. The transfer of FWPCA from HEW to the Interior moved the water laboratories but left a backwash of related functions with limited support. One such function, water hygiene, remained at USPHS. In 1966, Secretary Gardner stated that the Public Health Service would maintain surveillance of water supplies "to determine the presence of such contaminants as disease-producing organisms, pesticides and other chemicals, and radioactive substances." It is obvious that this arrangement was not successful. This split responsibility may have prevented the timely discovery of mercury, or other dangerous poisons and chemicals now or likely to be present in our water and food chain.[1]

B. Degree of Consolidation

Many knowledgeable and dedicated people argue that EPA inadequately consolidates; indeed, many functions and agencies have been omitted, for example:

Aircraft Noise Abatement (Transportation);
National Oceanic and Atmospheric Administration (Commerce);
Environmental Science Services Administration (Commerce);
Sewage Grant Programs (HUD);
National Institute for Environmental Health Services (HEW);
Industrial Hygiene (HEW);
Office of Water Resources Research (Interior); and
Office of Saline Water (Interior).

Then, why don't we make EPA more inclusive? The answer remains one of degree, emphasis, and limits of the political system. There are just too many agencies to include everyone. In the above list, there are honest differences as to emphasis, definition, and program relation to environment as opposed to other functions such as urban development. The following outlines the scope of governmental involvement in environment.

---

[1] In response to these threats to drinking water supplies, Representative Howard W. Robison of New York recently introduced a bill authorizing EPA to develop a national research and development program for achieving high quality drinking water throughout the nation.

The primary media for pollution ignores political boundaries. Since water and air are requirements for life, prerequisites for land and industrial development, and resources dear to the hearts of conservationists, it is not surprising that nearly everyone has joined in the environmental boom. Except for tragedies such as that which occured in Donora, Pennsylvania and occasional radiation scares, water has enjoyed the major emphasis.

Figure 12 shows the number of environmental health agencies at the State and metropolitan level in 1969; it does not include the growing number of State water planning and management agencies (over 200 in 1960) (61). There are presently two trends in state organization:

a. Grouping "major water-related functions in a single organizational entity." Functions include fish, wildlife, recreation, forestry, health, utility, public works, agriculture, state engineers, and conservation. These collectively form a kind of natural resources department.

b. Placing "...all environmental protection activities in a single environmental protection unit. Control of air and water pollution and regulation of solid waste disposal are inevitably interrelated. Divisions of environmental protection or 'clean air and water' seem likely to be employed increasingly." (60-pp 458-459)

By 1965, most of the country was covered by at least one type of water agency. Historically, these have been one of the following:

a. Interstate compacts between States to:

  (1) Allocate water.

  (2) Control Pollution.

b. Interstate Compacts with the Federal government as a full member.

c. River basin interagency committees.

d. River basin commissions.

e. Special surveys by Federal Agencies, e.g. Corps of Engineers 308 Reports and the current Northeast Water Supply Study.

f. River basin offices of the Bureau of Reclamation, Corps of Engineers, and EPA. (62)

At the Federal level, about 25 Congressional subcommittees, 25 bureaus, and 7 departments habitually involve themselves in the nation's environment.

It is not surprising that some 80 odd Federal offices share environmental management; it is surprising that all agencies are not involved. The point remains that a central organization having jurisdiction over all environmentally involved agencies would literally have everything in it. Figure 13 indicates the degree of water function proliferation in Federal agencies.

If consolidation is the major premise for reorganization, it should be abundantly clear that in broad areas like environment, natural resources, water resources and the like, consolidation really means only selection of some areas within the reorganization framework. Broad fields such as these are diffused throughout Government and reorganization offers no simple panacea to visualized problems.

C. Enforcement

In the past, friendly persuasion and pollution conferences constituted the main thrust in enforcing pollution control standards. But even this limited enforcement was done in terms of the various factors of the environment. The President's organizational expert Mr. Roy Ash, an industrialist, must have realized that industry which produces and lives with a variety of waste products was receiving uncoordinated pollution control directives from many agencies. The EPA concept presents definite advantages in terms of improved linkages from government to industry. It may be that this total environmental approach may be the great force in pollution abatement.

There have been water pollution control laws since 1899. Although enforcement provisions are weak, resolution to enforce them, weak as they are, has been weaker. Successive administrators of responsible agencies and departments have tried friendly persuasion to obtain voluntary pollution abatement. It is by now painfully obvious that these tactics have not worked and will not work. Nonetheless, there remains the tendency to have one more go at a gentlemanly approach. EPA Administrator William D. Ruckelshaus gives encouragement that things might change by recently serving notice on three major cities (Atlanta, Detroit, Cleveland) to halt violations of water standards or face possible court action after six months. Satisfactory resolution of these cases and a similar approach to industry will gage the resoluteness of EPA to demand results.

Those responsible for reorganization should give adequate guidance to the new agencies to insure that administrators understand the concern for meeting social needs such as improving efficiency, required law enforcement, and other program objectives - and that reorganization was not solely for the sake of reorganization.

D. Identity and Future Priorities

There is no guarantee that EPA as an integrated organization will operate effectively or that its water pollution functions will remain identifiable to the hosts of outspoken critics. In comparison to the grant and operating capital that FWQA brought with it to EPA, other programs brought relatively little. It is not difficult to predict which program would obtain necessary funds if EPA were confronted with a choice between making streams habitable for trout or decreasing smog to make cities habitable for people.

Senator Ribicoff is quite correct to note the danger of pollution by broken promises. We have not entirely leveled with the American people. Too often, for example, bond issues for waste treatment plants have been promoted by inferring that such construction was all that would be required for pollution control and abatement. Yet, it was clear that this would not be adequate but rarely was the public so informed. One great current need is to provide the public with a realistic appraisal of what is possible, and to help public officials deliver on these promises. Pollution cessation and abatement will cost a great deal of money, but manageable and competitive with the cost of other needed social commodities on a per capita basis. Are people willing to pay the price? If unwilling to vote the necessary bond issues, will they reduce their standards of living and if necessary permanently unplug their dishwashers, go back to the use of plain soap, and forego the use of fertilizers, pesticides, herbicides, and certain middle industry products? Do localities value clean environment more than industrial growth? Will Idaho retain its wild rivers or invite industry to relocate there? Will Congress specify some minimum standards nation-wide? Hard questions such as these must be faced, evaluated, and answered. The Federal government, too, must square with the American people, inform them of the price, and pose rational questions to include tradeoffs and opportunity costs. We possess the technology and the wealth to accomplish the job; but do we possess the necessary will and determination?

President Nixon gave assuring signs in his 2 February 1970 Economic Report by stating we "must involve the American people in setting goals and priorities by providing accurate, credible data on the long-range choices open to them, making possible much better informed public discussion about using the resources we have in meeting the needs of the future." But all signs are not bright; there is a real danger that environmental involvement may become a passing fad. In analyzing the 1970 Report of the Council of Economic Advisers Lester Taylor noted "given the administration's apparent commitment to combating pollution, the section on the protection of the environment is thin. A careful and detailed discussion of the welfare aspects of pollution control would contribute to public understanding of the problems and issues involved." Almost everyone joins him in hoping CEA more fully addresses the subject in the current report. (66)

Appropriations for water pollution have been steadily increasing; however, funds appear small in comparison to those committed to other programs. Pollution control competes not only with the Defense Department for funds but with social programs as well. Congress increased appropirations for physical resources (mainly highways and water resource projects) from $6.4 billion to $10.2 billion from 1960-1965. Total appropriations during the same period increased from $92.2 billion to $118.4 billion. Due to emphasis on social programs, physical resource appropriations increased by only $0.3 billion during 1965-1967 and by $0.5 billion from 1967-1969. [There are increases of $0.4 billion for water resources and $0.2 billion for water pollution in the 1971 budget.] (67-pp 11-12) Federal grants for water pollution control grants totaled $0.2 billion, $0.8 billion, and $1.0 billion in respective years of 1969, 1970, and 1971. (67-pg 15) In January 1970, the President had requested an advance of $0.4 billion on a proposed four year $10 billion program (shared by Federal/States in 40/60 proportion) to assist state and local governments in obtaining loans for their program shares. Congress rejected this proposal as inadequate and appropriated $1 billion of $1.25 billion authorized under an old statute.

In his budget message of January 29, 1971, President Nixon requested EPA appropriations of $2.5 billion, roughly twice the 1971 funds. Doubling of Federal grants for municipal sewage plants (from $1 billion to $2 billion) accounts for most of the gross increase. However, funds requested for clean air and solid waste programs are less than those authorized by Congress last year for FY 1972. It is planned to increase EPA personnel by 2, 640 (from 6, 223 to 8, 863) by July 1972. Figure 14 gives a brief comparison between the FY 1971 appropriation and the administration's requests for FY 1972 funds.

On the record of the EPA reorganization, considering the statements of the Administrator on enforcement, the budget proposals of the President, and the tenor of the Congress, it would appear that this reorganization will have effected those public policies desired by the reorganization. If these signs come true, the example should be given due consideration in any future reorganizational efforts.

E. Bureaucratic Cooperation and Morale

Executive and Congressional reorganizers exhibited little concern for Public Health career people either as a team or as individuals. On the other hand, the internal USPHS leadership failed to develop and utilize the professional staff which provides the technical and planning leadership to a viable organization. The startling amount of experimentation in institutional arrangements for environmental protection severely damaged the Commissioned Officer Corps of the Public Health Service, lost five to eight years of effort (in spite of increasing national interest, appropriations, and legislation), and destroyed historically developed arrangements for cooperation. Bureaucracies often modify their reasons for existence and tend to perpetuate themselves. On the plus side, periodic and frequent reorganizations could provide necessary shake-ups. Perhaps thinking grows staid and it becomes appropriate for reappraisals and reevaluations to pare away the fat and deadwood in ideas and personnel. However, on the negative side, time is lost defining a mode of operation, training new people, establishing a bureaucratic character, and developing interdepartmental relations through a great many memoranda of understanding. In effect, identical concerns remain to be solved by a whole new set of relations. Administrative neatness is certainly important to those who draft organizational wiring diagrams, but it is suspected that any of the past organizations or any future mutations thereof could have done or will be able to do the environmental job given determined direction, emphasis, enforcement powers, and realistic appropriations.

FWQA developed working relationships with Agriculture (pesticides and herbicides), Fish and Wildlife, Atomic Energy Commission, and USPHS (water hygiene and health research). These arrangements, although requiring no re-invention necessitate some renegotiation and strengthening. In addition, there remains a large reservoir of concern regarding pollution control functions of the Corps of Engineers, Soil Conservation Service, and the Bureau of Reclamation. Working relationships require definition.

It remains to be seen what devices the President will use to compensate for the fact that EPA is not a department and has no specific cabinet member as an active program advocate. President Johnson used three devices in a similar situation with the Office of Economic Opportunity: placed OEO in his executive office, designated Director Sargent Shriver as one of his personal assistants and directed him to attend cabinet meetings. These devices fell short of desired results since several regular cabinet members coordinated only reluctantly with a bureaucratically inferior agency. It should be noted however that the entangling Viet Nam situation in 1965-1966 prevented the President from enforcing the prestige decreed to OEO. The position of EPA is radically different in another respect - it will not only have administration over certain grants but also will possess direct enforcement authority over pollution to include that caused by other government agencies and departments.

President Nixon could well encourage interdepartmental cooperation by leaving no doubt that he will back EPA in a crunch.

F. Program Emphasis

In retrospect, it is obvious that Surgeon Generals and HEW Secretaries did initiate but did not maintain emphasis on environmental pollution control and enforcement. That situation resulted through a sharing of disresponsibilities throughout the Federal governmental spectrum. Neither the Executive nor the Congress did anything to indicate that pollution control was of high priority. The Federal Government enacted its first water pollution control act in 1948. However, due to consideration of grant administration, President Franklin Roosevelt had vetoed a strikenly similar bill nine years previously.

The Second World War distracted Congress from water pollution issues; even after the 1948 Act, Congress failed to support the program with adequate funds or with provisions to enforce quality standards. Twenty years ago the Public Health Service marked out a minimum program requiring water pollution control appropriations of $500 million per year for ten years for municipal water pollution abatement and a like amount for industry. ("Water Pollution in the United States," USPHS Publication 64, 1950-51.) Not until 1968 did Congress appropriate a figure of $500 million for these purposes. By 1970 Congress appropriated over $1 billion; however, by this time, construction costs had increased over those of 1951 by about a factor of three.

The Water Pollution Control Act of 1948 established the principle of Federal financial aid for sewage treatment plants; Congress recommended $22.5 million be made available at 2% interest to States, cities and intermunicipalities to assist in treatment plant construction. Funds were impounded by the Executive Office of the President; and, therefore, regardless of stated policy, there was no construction aid between 1948 and 1956. In spite of the fact that President Eisenhower vetoed a 1959 House bill increasing Federal construction grants, appropriations progressively increased from $50 million per year to $150 million per year from Fiscal Year (FY) 1956 to FY 1967. The 1966 Amendment (some 16 years after the $500 million per year Public Health estimate) made it evident that Congress had realized that pollution control would cost a great deal of money by authorizing $3.4 billion for fiscal years 1968-71.

Grants for water pollution control programs followed a similar pattern. In 1948, one million dollars were appropriated to aid state programs; but, after several years, Congress struck out these provisions. This action dealt a severe blow to Federal pollution control work by implying Congress was unwilling to provide even limited support to the early national pollution control effort. In 1956, this provision was reinstated and extended to $3 million annually through FY 1961. Annually, ten million dollars have been made available from FY 1968 through FY 1971.

Federal pollution enforcement procedures remain extremely weak. The 1948 Act provided for abatement of interstate pollution endangering the health or welfare of any persons; however, Congress clearly stated in the next decade that Federal enforcement was to be initiated only as a last report. The 1961 Amendment extended abatement provisions to intrastate and coastal waters and permitted Federal suit against interstate water polluters without permission of the affected States. It also authorized Federal action in cases of intrastate pollution of intrastate or navigable waters at the request of the governor. However, little has been done to facilitate the full legal process under the Water Pollution Control Act against those responsible for pollution. Enforcement agencies have relied upon unwieldy, and not too successful pollution conferences to correct incidents. Conferences have been used to delay action through time extensions and other delaying tactics while recourse to the statutory process established by the Congress has not been utilized. As a result primarily of inaction by the Executive Branch the statutory law has been assessed as unmanageable. In its place the Executive Branch and anxious members of Congress seem willing to place their faith in the Corps of Engineers Rivers and Harbors Act of 1899 adjusted by a modern interpretation for application to todays situation. It would be a mistake to view the problem of enforcement of pollution control as a matter to be solved by reorganization. Rather, it is clear that the will of the Executive Branch, supplemented by sufficient congressional support was all that was really required.

Criticism of the Public Health Service in its larger environmental role becomes blurred between its execution of medical and environmental obligations. Except for a few unfortunate statements, no one has effectively criticized operations of the Public Health Service. The problem of internal priorities developed through competition for funding cancer, heart, and other diseases vis-a-vis environmental needs. Choices among the several high priority programs was decided partly at HEW and PHS levels and partly, perhaps primarily, at levels much higher.

It is suggested that the Executive and the Congress share with the USPHS and HEW the past failures and inabilities to forcefully challenge environmental pollution of water, air and land. The Executive failed to give a clear mandate to USPHS and to HEW to initiate and maintain proper emphasis for environmental pollution control and abatement. More seriously, Chief Executives failed to direct Surgeon Generals and HEW Secretaries to increase emphasis and attention by whatever amounts necessary to ensure program adequacy. If such a correctional approach failed, replacement by an administrator of stronger environmental sentiments would have been in order; there would have been no requirement to shift program responsibility to a different department with supposedly stronger leanings toward environmental preservation. The Congress, too, could have reduced the burden of the USPHS and HEW by designing effective legislation. Even today, the Nation awaits comprehensive action to modify ineffective enforcement procedures and to enact legislation that is more direct, comprehensive, timely, and effective.

G. Strategy and Politics

A good policy may be judged by its compatibility with the grain of history. EPA was organized to not only solve present problems but to also attack problems of the 1980's and 1990's.

We have witnessed the dubious value of a water pollution control policy that demanded too little. It is suggested that actions that demand too much through sweeping changes and possible commitments to irreversible policies would prove politically infeasible and be equally ineffective. What about realistic as opposed to idealistic goals? "Satisficing" is a term used to define the selection by consensus of a goal (short of maximization) that is acceptable. It provides a realistic approach to reach agreement among groups whose values and objectives substantially vary in situations where trade-offs are difficult to define and objectives are inadequately identified. Such an incremental or serial approach prevents big mistakes, encourages advocacy, and relies on the built-in wisdom of the system. It is true that a sequential approach does not pay dividends in quantum jumps but it does provide steady and measured progress.

However, EPA must understand the history of environmental control in this country. It must recognize the early, permissive stages that have already gone before. It has no option now except to provide the drive, leadership, and results which the United States now demands. The survivability of EPA will depend on its effectiveness in:

- enforcing the law;
- providing the funds and allocating them effectively on a priority basis;
- developing and implementing national standards (e.g., Federal standards on all navigable waters);
- promoting regional systems;
- seeking full information on industrial and municipal pollution sources;
- initiating and maintaining an effective program of aid to industry and to the States for pollution control and for mitigation of economic dislocations;
- aiding States to strengthen and redesign their individual environmental programs;
- placing new technology into effect, through consolidated systems, as soon as possible;
- developing and maintaining an aura of understanding, trust, and cooperation within the Federal bureaucracy.

In healing old reorganizational wounds and promoting cooperation, EPA might well consider adopting a frank and open public policy that acknowledges the past losses and gains and that sets the stage for EPA to move into the future unhampered by the past.

Public health can not be separated from environmental protection. Senator Muskie remarked that FWQA might have discovered the present mercury pollution crisis if water hygiene had been an integral part of its organization. Now EPA does have this capability and must effectively employ it to prevent other such pollution possiblities. When the Public Health Service administered the program, conservationists clamored for a separate and identifiable water pollution function; now public health advocates are concerned that drinking water supplies will not be given proper emphasis in EPA's integrated approach outside of the Public Health Service!

How do we take environmental protection out of the political arena? Since political values permeate every aspect of the governmental decision process, the answer is that you can not. Ambitious bureaucrats, crusading Congressman, and members of the news media, industry, agriculture, conservation associations, and other special interest groups knead and massage the environmental issue both for selfish reasons and in pursuit of their honest concept of the public interest. The goal must be to minimize adverse political effects. Not only will EPA Administrators have to decide what is harmful to society and unflinchingly enforce standards, they must also normalize operations to the politically practical desires of the President, Congress, State-local-interstate arrangements, and other executive agencies. However, EPA must avoid rubber-stamping mere political policies. EPA must enter the constitutional arena in battles between Federal and State interests to obtain agreement on goals, standards, and a satisfactory jurisdiction over all waters and other pollution media throughout the country. To be effective, Mr. Ruckelshaus must also reach an accommodation with the whole spectrum of our mixed system of private and public enterprise. It will not be easy to balance regional needs against national pollution standards; and for exactly this reason, many favor regional standards as opposed to blanket standards. It is quite clear that at least for the past 25 years economic competition between industries and between States for industrial location or relocation has prevented an accomodation with any common denominator of nation-wide economic efficiency and water and air pollution standards. It appears equally obvious that any effort to reduce competitive advantages demands Federal standards and must be initiated and sustained at the national level.

Bureaucrats who successfully deal with Congress realize that Congressional Committees possess a great deal of power, expertise, and knowledge. House Committee members have been in Congress for six or seven terms; House Committee chairmen have had the job for 10 to 15 years and have been in Congress about six terms before that. Wise political appointees compare their maximum possible tenure during the administration of a two-term president and act accordingly. Again, however, EPA would be derelict in its duties if it failed to actively tender its best technical assessment and program recommendations to the Congress. For the first time, a comprehensive body of environmental expertise encompassing most of the add-ons to water pollution is consolidated within one agency with strong Congressional and Executive support. EPA is designed to strip away much of the bureaucracy concerned with environmental protection, facilitate States and local governments to fulfill their environmental obligations, ease the administrative load on industry, and identify voids in environmental law and programs. Clearly, its duty lies in forcefully marking out a national environmental policy for presidential submittal to the Congress for its consideration. If it assumes this duty passively or with uncertainty, it must bow with hopeful but dubious confidence to legislative leadership in the field.

It is hoped that this discussion of a series of executive reorganizations will cause proponents of future reorganizational proposals to more thoroughly evaluate consequences, both good and bad, before implementing changes of far-reaching consequences. Although the objectives and programs of Federal environmental protection could have been accomplished short of successive and sometimes demoralizing reorganizational efforts, the present approach appears extremely promising. EPA is recognized as the undisputed Federal spokesman in the environmental field and has the visibility necessary to argue as to the degree of consolidation. It does control a heavy working majority of those functions and action agencies having relevant input to the mission of pollution control. EPA administrators have enthusiastically accepted their mandate, devoted time and effort to identifying areas requiring improvement, and initiated administrative and legal enforcement proceedings against offenders. Members of both political parties continue to introduce legislation containing characteristics required to implement needed policies and programs of the nation's expectations of pollution control. There is evidence of new sets of equilibriums between Federal bureaucracies; Federal, State, and local governments; and facets of the public-private enterprise system that auger well towards ultimate resolution of the pollution problem. With signs currently pointing towards reassurance that the current reorganization will accomplish the national pollution control mission, it must be understood by all that it is no longer possible to equivocate with environmental pollution control enforcement.

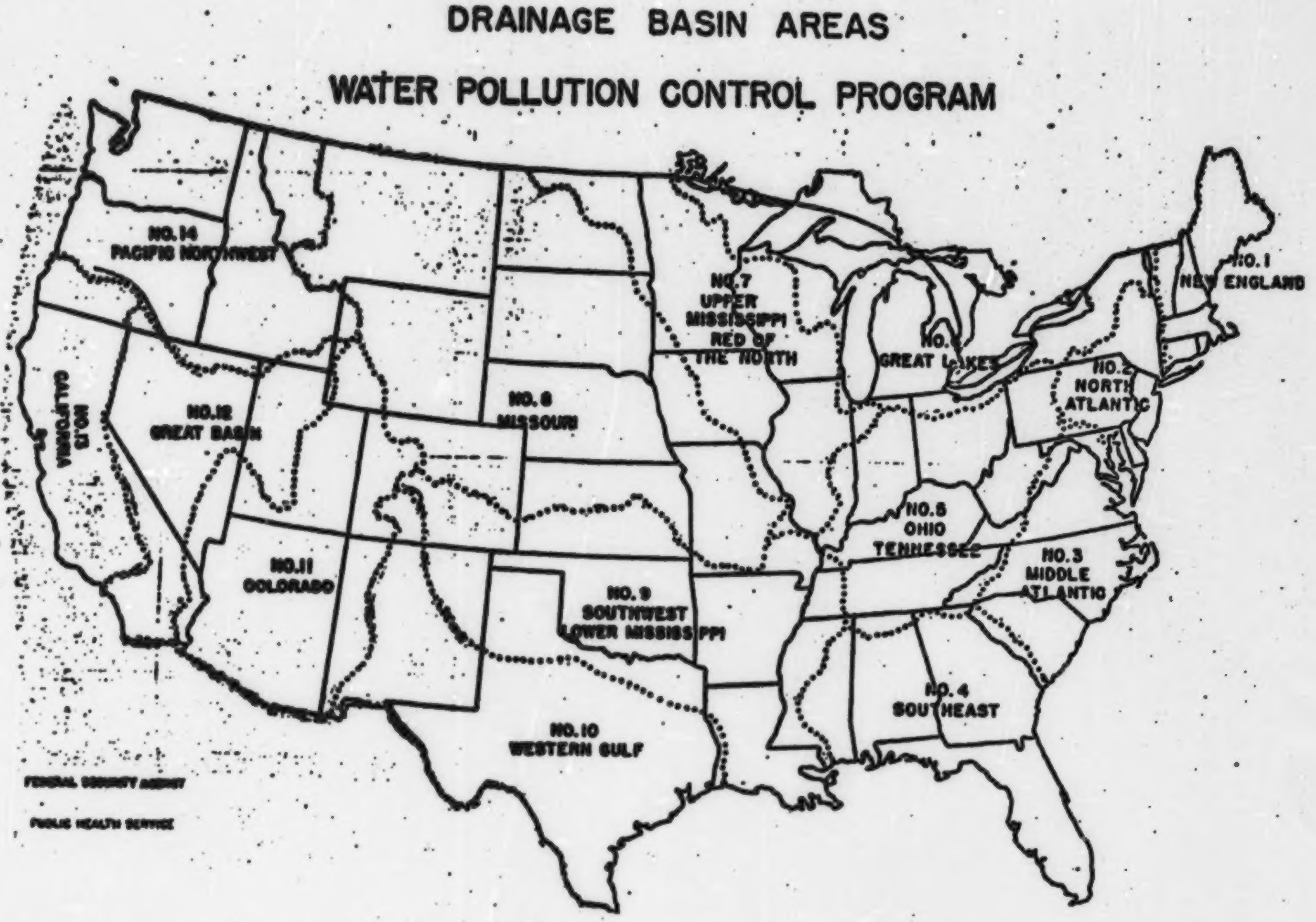
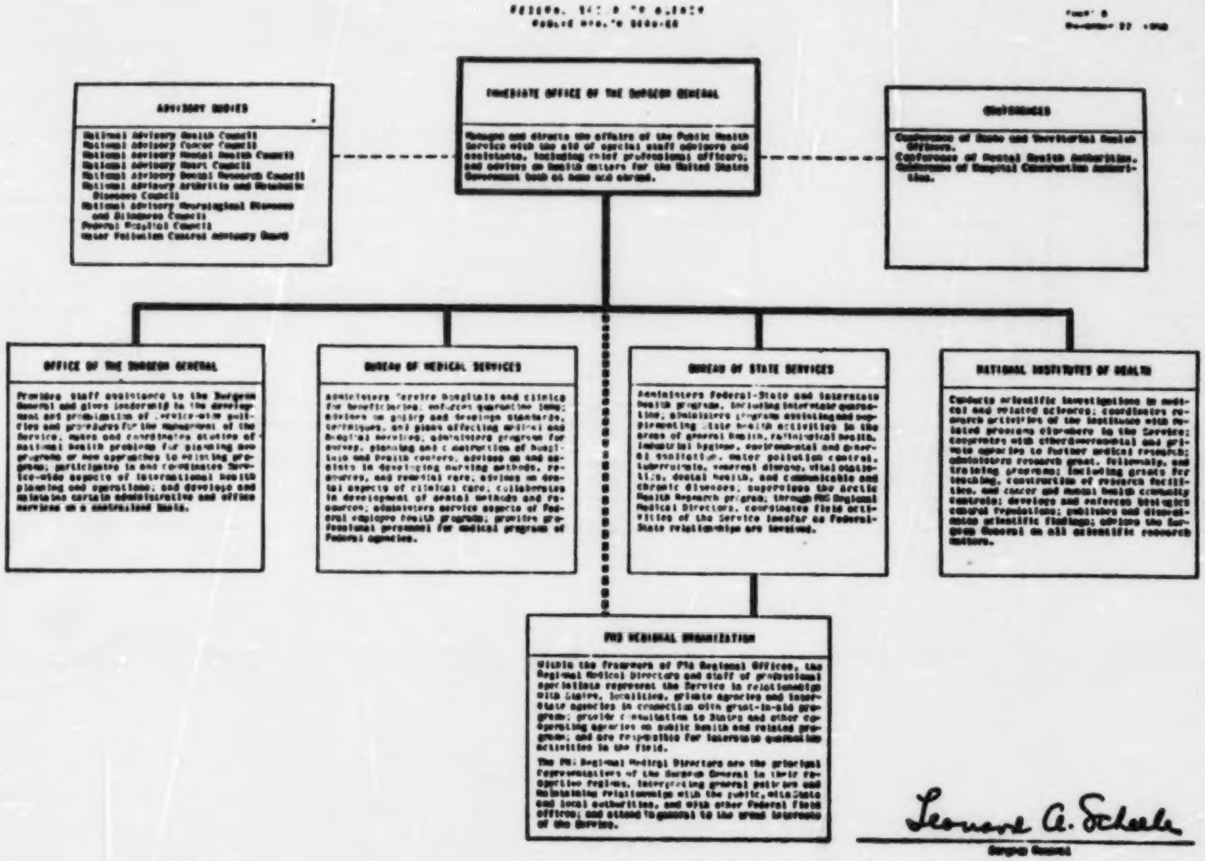


Figure 1: Reference 4, Page 309


FEDERAL SECURITY AGENCY
PUBLIC HEALTH SERVICE
ADVISORY BODIES
IMMEDIATE OFFICE OF THE SURGEON GENERAL
CONFERENCES
OFFICE OF THE SURGEON GENERAL
BUREAU OF MEDICAL SERVICES
BUREAU OF STATE SERVICES
NATIONAL INSTITUTES OF HEALTH
PHS REGIONAL ORGANIZATION

Leonard A. Scheele
Surgeon General

Figure 2: Reference 1, Page 777

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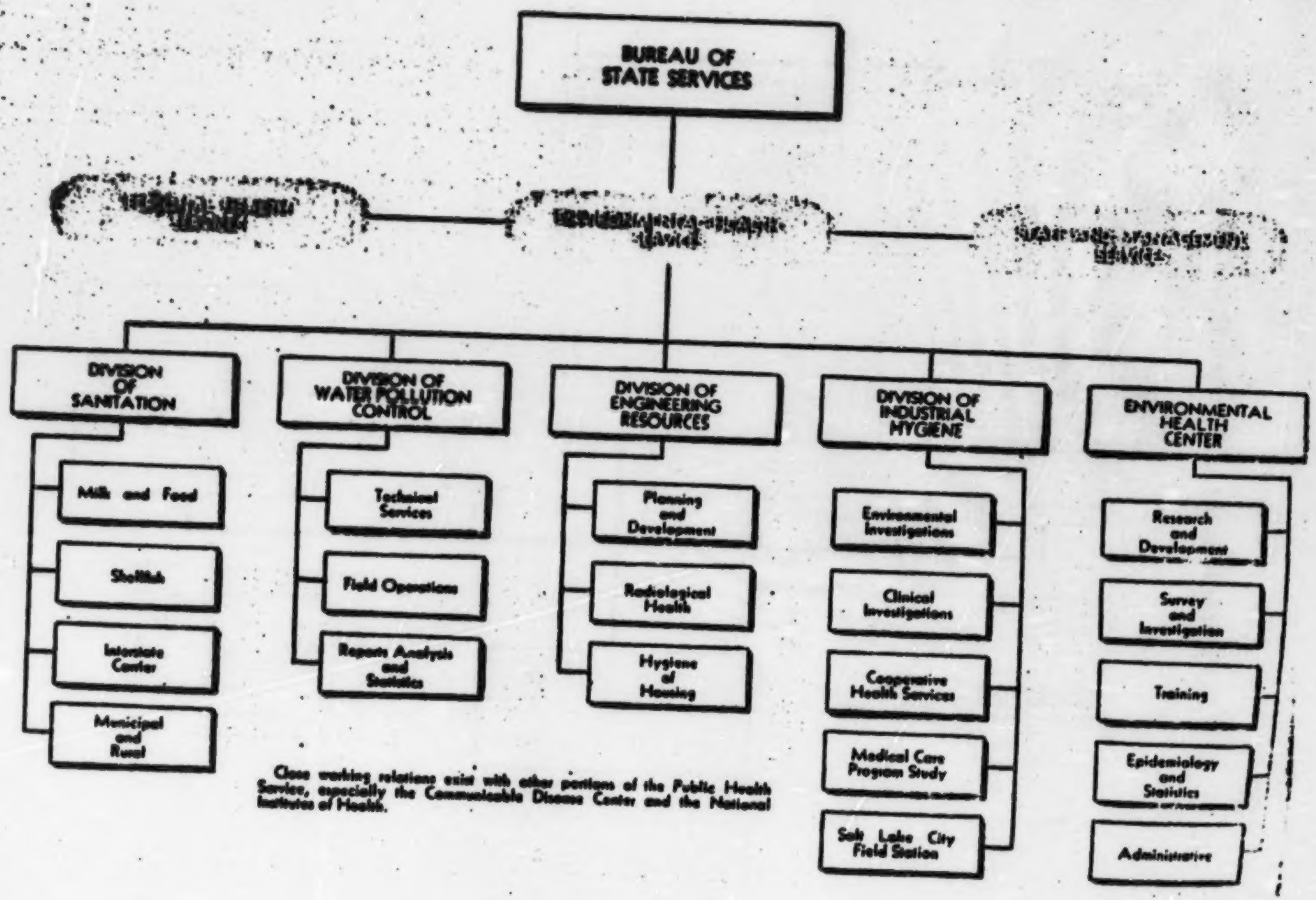
ORGANIZATION OF ENVIRONMENTAL HEALTH SERVICES—U. S. PUBLIC HEALTH SERVICE



Close working relations exist with other portions of the Public Health Service, especially the Communicable Disease Center and the National Institutes of Health.

Figure 3: Reference 7, Page 112

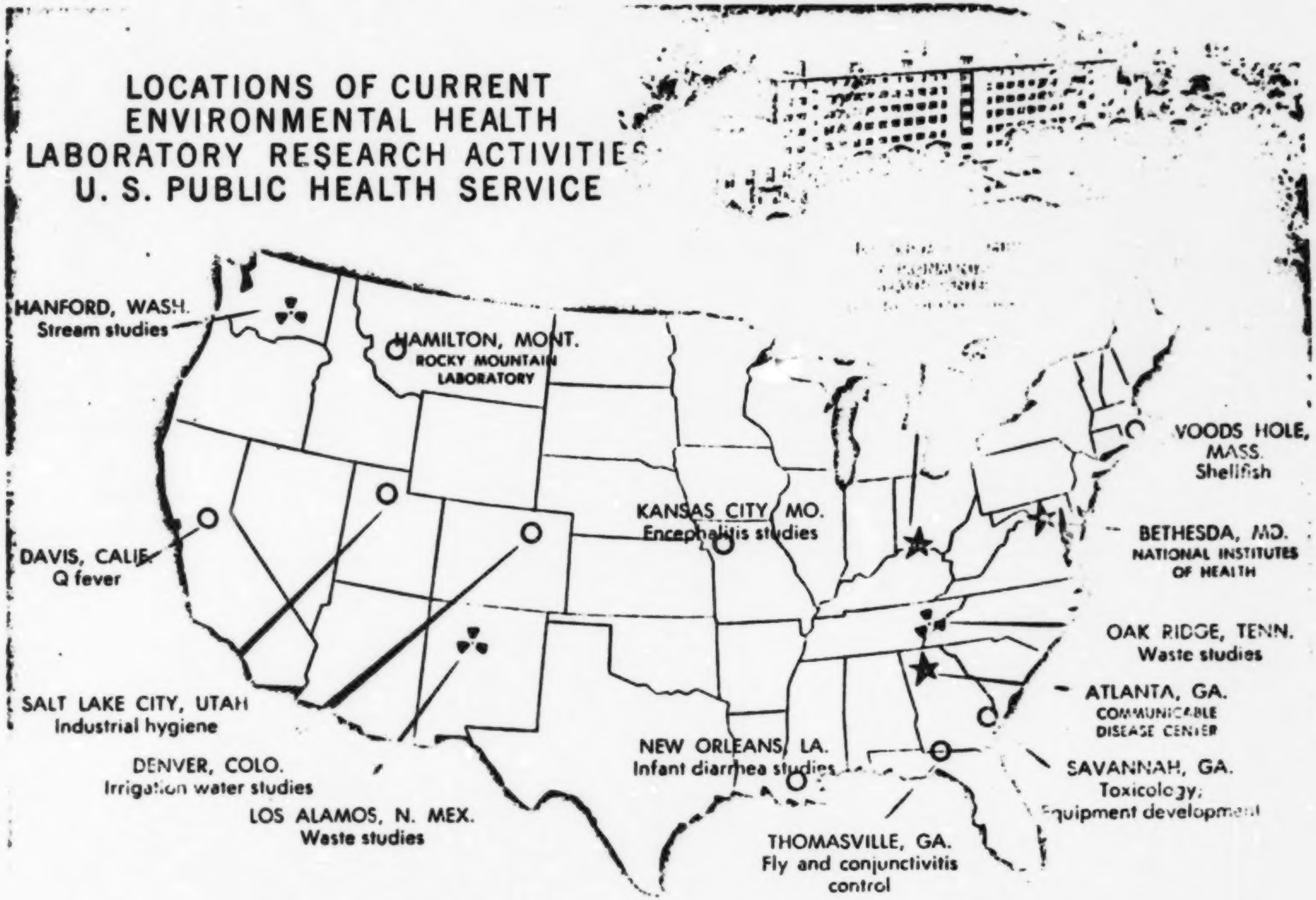


Figure 4 : Reference 7, Page 118

1961 USPHS Organization for Environmental Protection

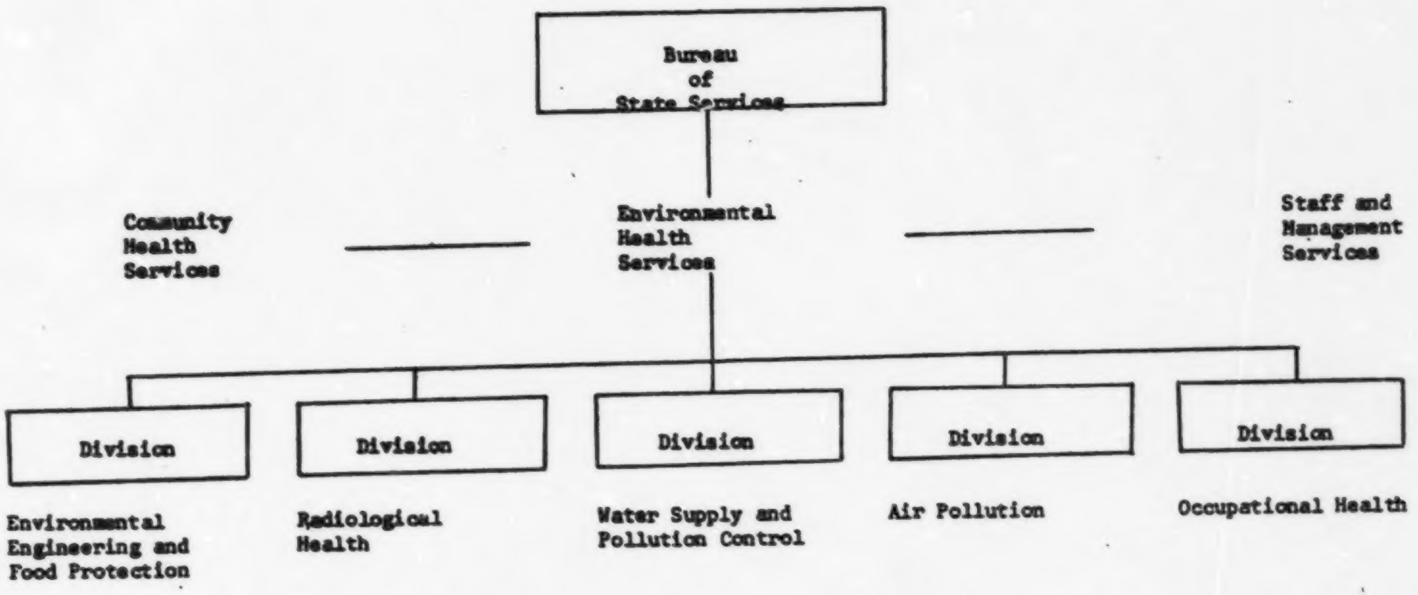
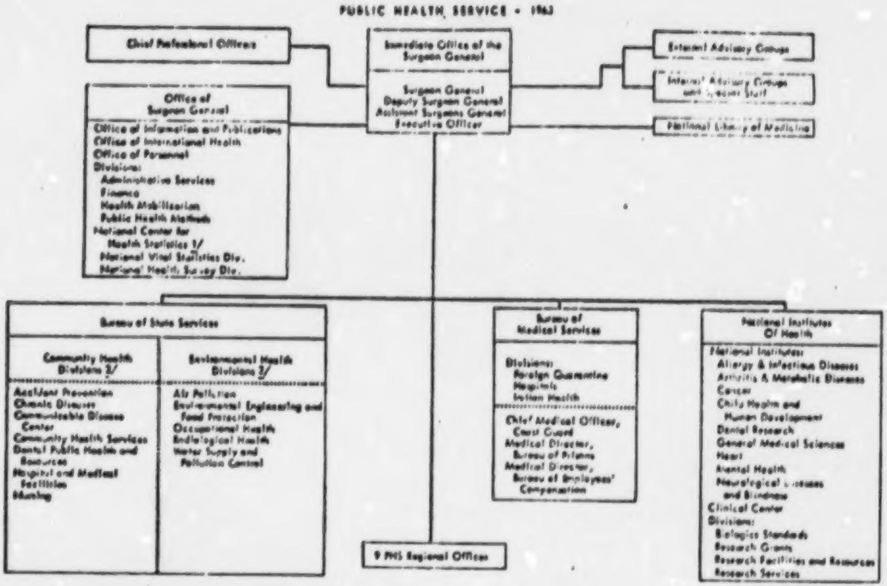


Figure 5: Compiled from Data Reference 12, Page 270

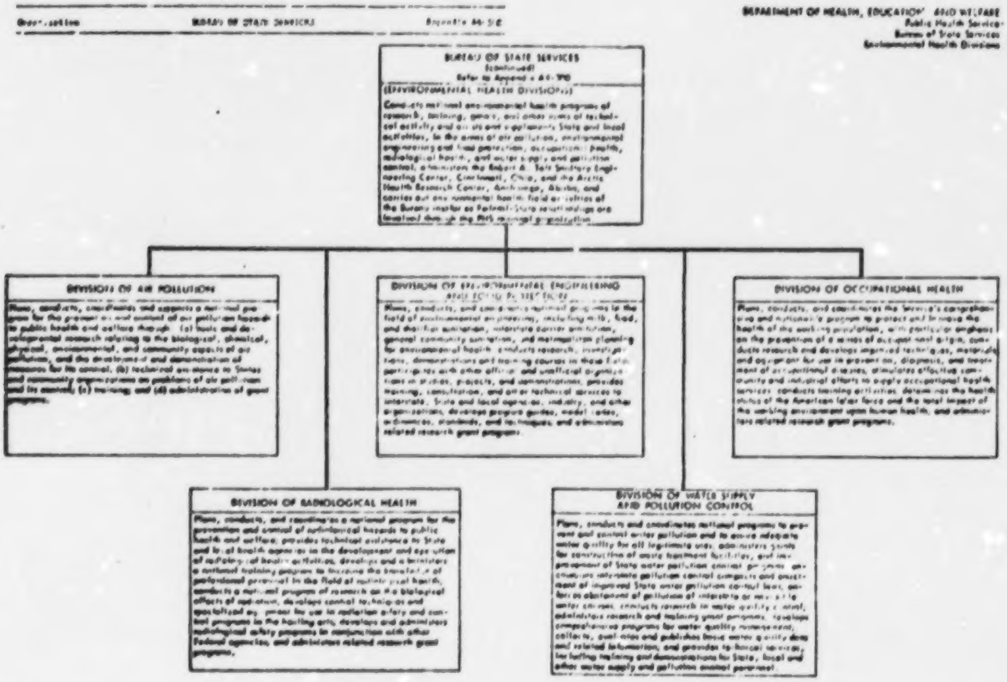

PUBLIC HEALTH SERVICE - 1963
Chief Professional Officers
Immediate Office of the Surgeon General
Surgeon General
Deputy Surgeon General
Assistant Surgeons General
Executive Officer
External Advisory Groups
Internal Advisory Groups and Special Staff
National Library of Medicine
Office of Surgeon General
Office of Information and Publications
Office of International Health
Office of Personnel
Divisions:
Administrative Services
Finance
Health Mobilization
Public Health Methods
National Center for Health Statistics 1/
National Vital Statistics Div.
National Health Survey Div.
Bureau of State Services
Community Health Divisions 2/
Accident Prevention
Chronic Diseases
Communicable Disease Center
Community Health Services
Dental Public Health and Resources
Hospital and Medical Facilities
Nursing
Environmental Health Divisions 2/
Air Pollution
Environmental Engineering and Food Protection
Occupational Health
Radiological Health
Water Supply and Pollution Control
9 PHS Regional Offices
Bureau of Medical Services
Divisions:
Foreign Quarantine
Hospitals
Indian Health
Chief Medical Officer, Coast Guard
Medical Director, Bureau of Prisons
Medical Director, Bureau of Employees' Compensation
National Institutes Of Health
National Institutes:
Allergy & Infectious Diseases
Arthritis & Metabolic Diseases
Cancer
Child Health and Human Development
Dental Research
General Medical Sciences
Heart
Mental Health
Neurological Diseases and Blindness
Clinical Center
Divisions:
Biologics Standards
Research Grants
Research Facilities and Resources
Research Services

1/Separate organizational status similar to the National Library of Medicine is proposed under the reorganization plan.

2/These groupings would become bureaus under the reorganization plan.

May 1, 1963

PHS-OSG-MPAS


BUREAU OF STATE SERVICES
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of State Services
Environmental Health Divisions
BUREAU OF STATE SERVICES (Continued)
(ENVIRONMENTAL HEALTH DIVISIONS)
DIVISION OF AIR POLLUTION
DIVISION OF ENVIRONMENTAL ENGINEERING AND FOOD PROTECTION
DIVISION OF OCCUPATIONAL HEALTH
DIVISION OF RADIOLOGICAL HEALTH
DIVISION OF WATER SUPPLY AND POLLUTION CONTROL

USPHS Organization for Environmental Health - 1963
Figure 6: Reference 23, Pages 99 and 100

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EXHIBIT 2

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

(AN ORGANIZATION PROPOSAL)

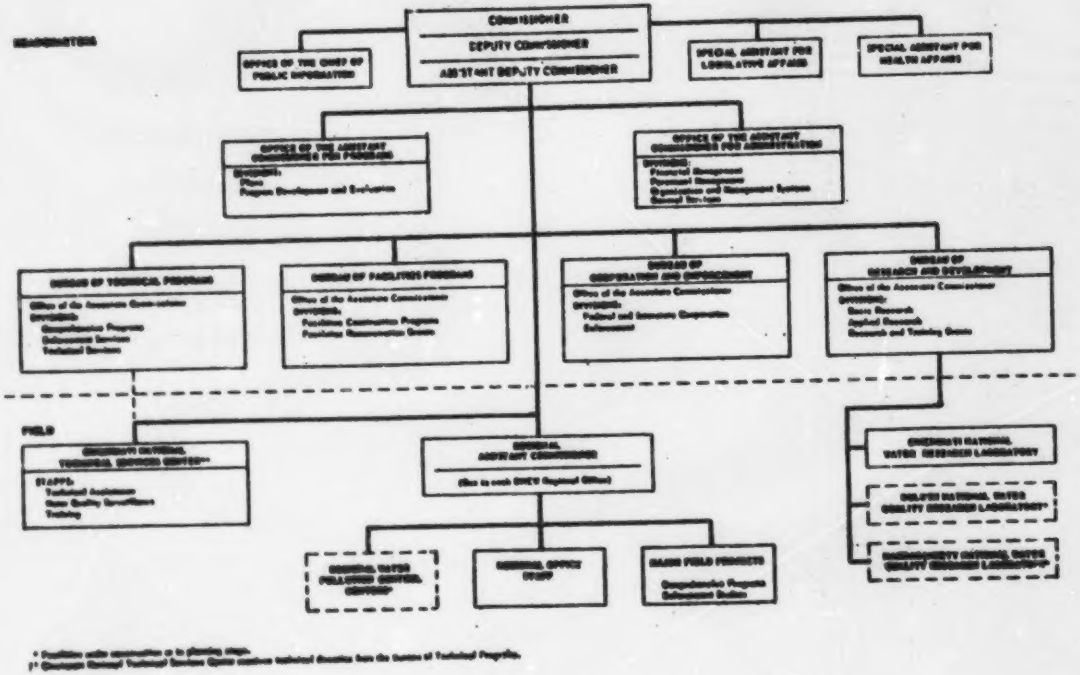
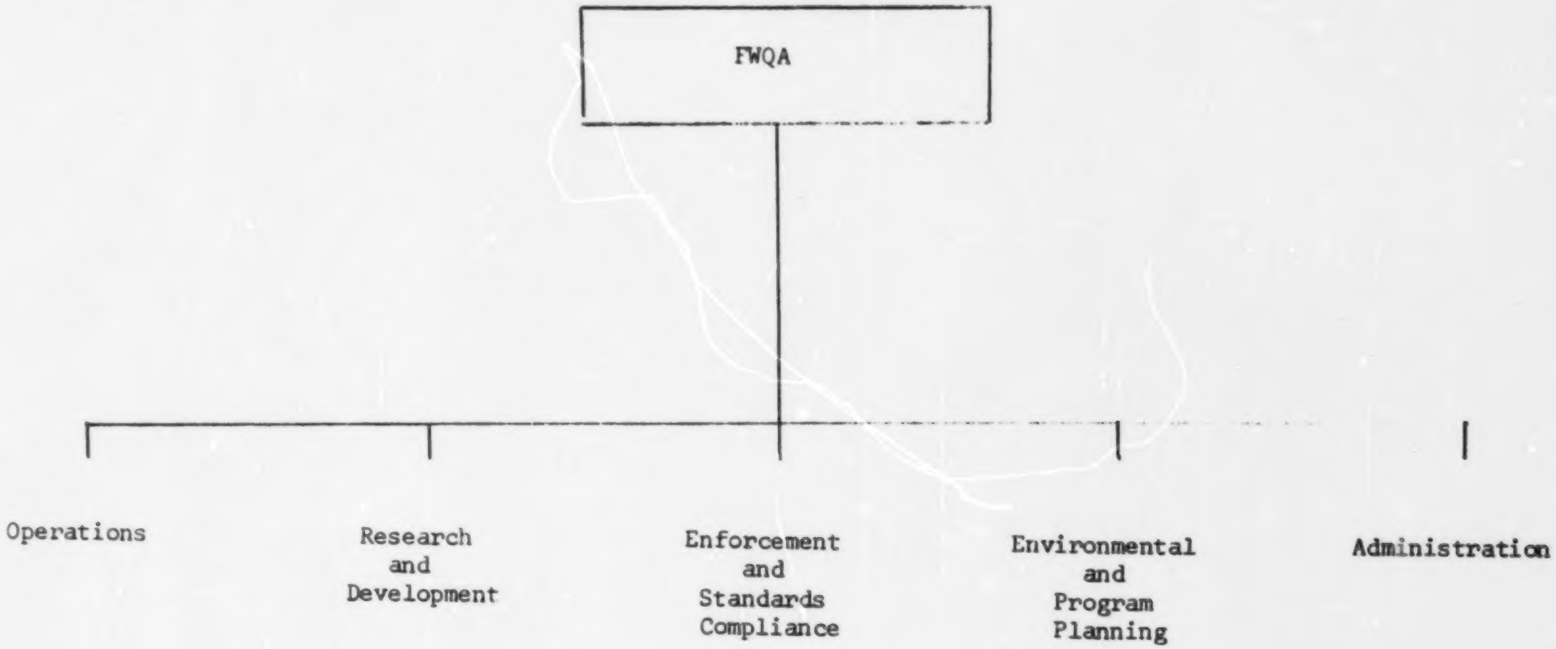

HEADQUARTERS
COMMISSIONER
DEPUTY COMMISSIONER
ASSISTANT DEPUTY COMMISSIONER
OFFICE OF THE CHIEF OF PUBLIC INFORMATION
SPECIAL ASSISTANT FOR LEGISLATIVE AFFAIRS
SPECIAL ASSISTANT FOR HEALTH AFFAIRS
OFFICE OF THE ASSISTANT COMMISSIONER FOR PROGRAMS
Divisions: Plans; Program Development and Evaluation
OFFICE OF THE ASSISTANT COMMISSIONER FOR ADMINISTRATION
Divisions: Financial Management; Personnel Management; Organization and Management Systems; General Services
BUREAU OF TECHNICAL PROGRAMS
Office of the Associate Commissioner
Divisions: Comprehensive Programs; Enforcement Services; Technical Services
BUREAU OF FACILITIES PROGRAMS
Office of the Associate Commissioner
Divisions: Facilities Construction Program; Facilities Demonstration Grants
BUREAU OF COOPERATION AND ENFORCEMENT
Office of the Associate Commissioner
Divisions: Federal and Interstate Cooperation; Enforcement
BUREAU OF RESEARCH AND DEVELOPMENT
Office of the Associate Commissioner
Divisions: Basic Research; Applied Research; Research and Training Grants
FIELD
CINCINNATI NATIONAL TECHNICAL SERVICES CENTER**
Staffs: Technical Assistance; Water Quality Surveillance; Training
REGIONAL ASSISTANT COMMISSIONER
(One to each DHEW Regional Office)
REGIONAL WATER POLLUTION CONTROL CENTERS*
REGIONAL OFFICE STAFF
MAJOR FIELD PROJECTS
Comprehensive Programs; Enforcement Studies
CINCINNATI NATIONAL WATER RESEARCH LABORATORY
DULUTH NATIONAL WATER QUALITY RESEARCH LABORATORY*
NARRAGANSETT NATIONAL WATER QUALITY RESEARCH LABORATORY*

Figure 7: Reference 33, Page 96


FWQA
Operations
Research and Development
Enforcement and Standards Compliance
Environmental and Program Planning
Administration

Federal Water Quality Administration (FWQA)

Figure 8

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
ORGANIZATION
(Prior to October 1968 reorganization)

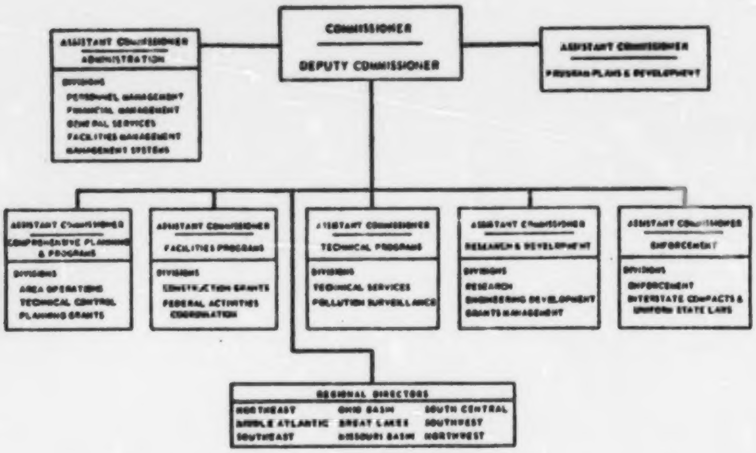


Figure 8a

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
ORGANIZATION
(After October 1968 reorganization)

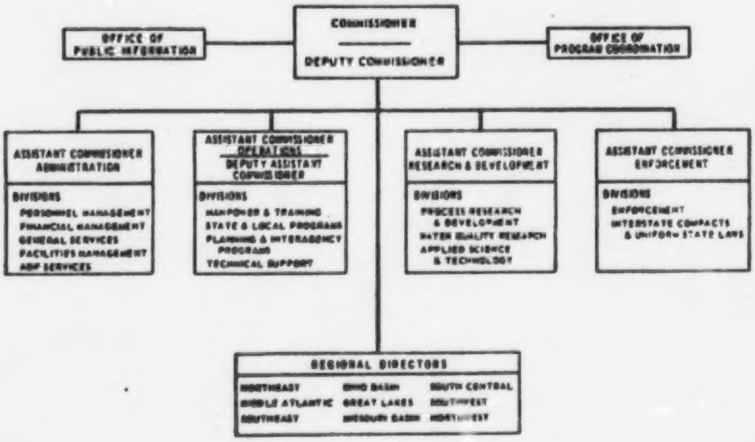
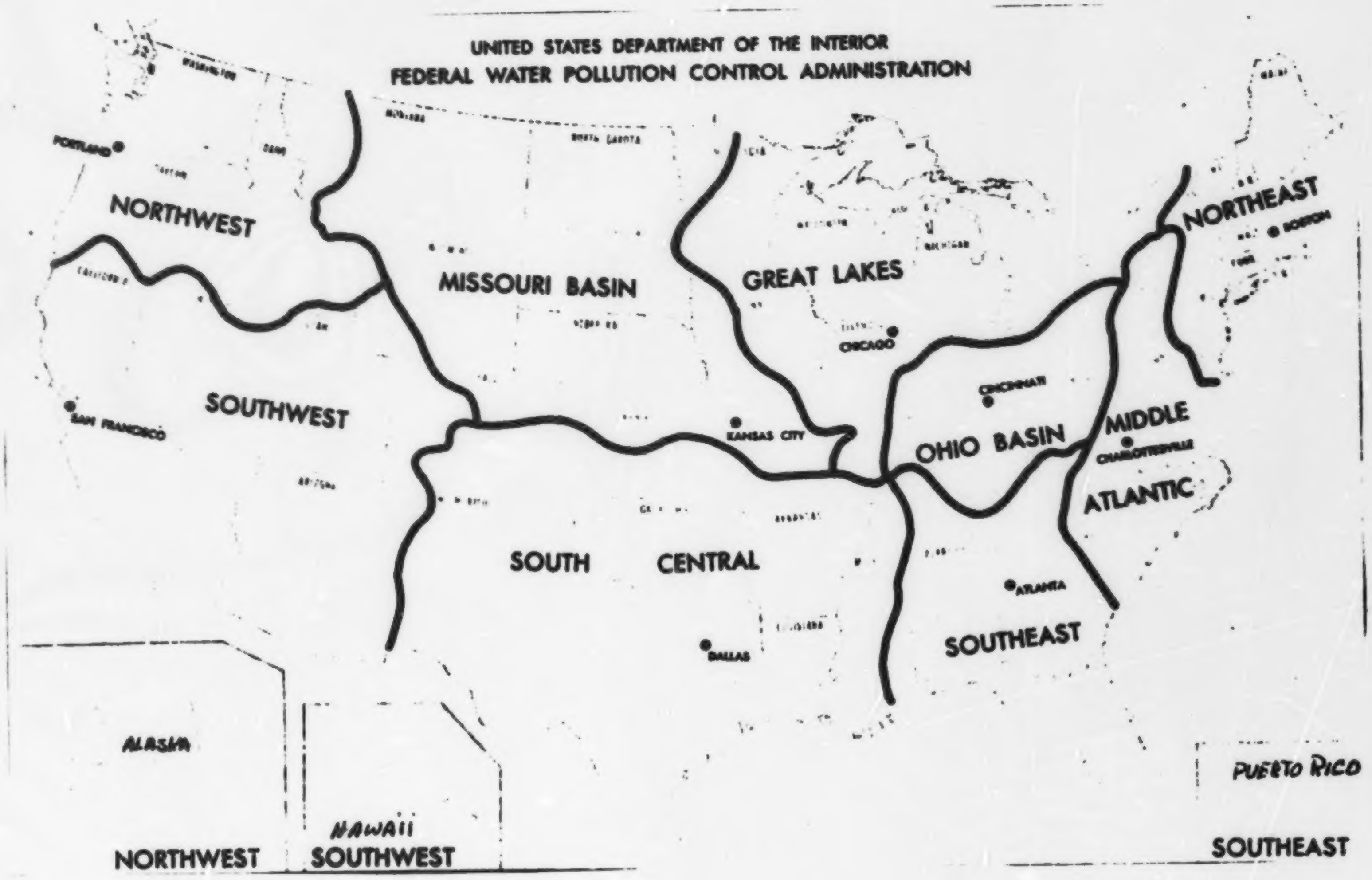
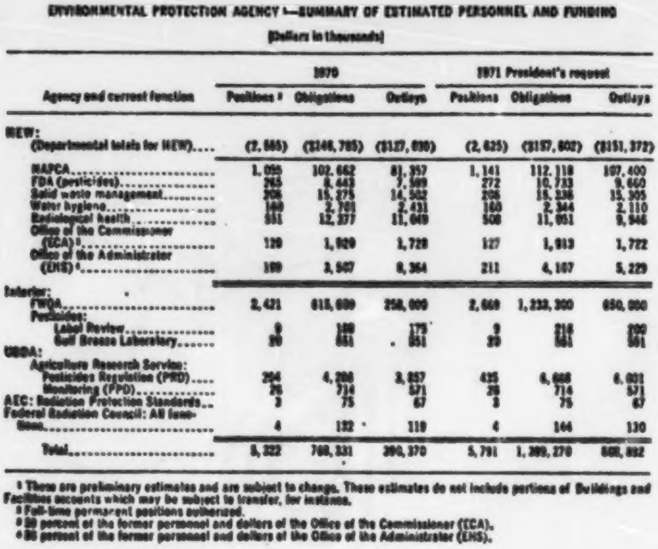


Figure 8b



FWQA Regional Division

Figure 9: Reference 52, Pages 7-21



ENVIRONMENTAL PROTECTION AGENCY [1]—SUMMARY OF ESTIMATED PERSONNEL AND FUNDING

[Dollars in thousands]

Agency and current function	1970 Positions [2]	1970 Obligations	1970 Outlays	1971 President's request Positions	1971 President's request Obligations	1971 President's request Outlays
HEW:						
(Departmental totals for HEW)	(2,565)	($146,785)	($127,030)	(2,625)	($157,802)	($151,372)
NAPCA	1,095	102,662	81,357	1,141	112,118	107,400
FDA (pesticides)	265	8,443	7,589	272	10,733	9,660
Solid waste management	206	15,275	14,502	206	15,336	15,305
Water hygiene	160	2,701	2,431	160	2,344	2,110
Radiological health	551	12,377	11,049	508	11,051	9,946
Office of the Commissioner (ECA) [3]	129	1,920	1,729	127	1,913	1,722
Office of the Administrator (EHS) [4]	100	3,507	8,364	211	4,107	5,229
Interior:						
FWQA	2,421	615,000	258,000	2,669	1,232,300	650,000
Pesticides:						
Label Review	9	189	175	3	216	200
Gulf Breeze Laboratory	30	551	551	33	551	551
USDA:						
Agriculture Research Service:						
Pesticides Regulation (PRD)	294	4,206	3,857	425	6,668	6,001
Monitoring (PPD)	25	714	571	25	714	571
AEC: Radiation Protection Standards	3	75	67	3	75	67
Federal Radiation Council: All functions	4	132	119	4	144	130
Total	5,322	768,331	390,370	5,791	1,398,270	808,892

[1] These are preliminary estimates and are subject to change. These estimates do not include portions of Buildings and Facilities accounts which may be subject to transfer, for instance.

[2] Full-time permanent positions authorized.

[3] 30 percent of the former personnel and dollars of the Office of the Commissioner (ECA).

[4] 85 percent of the former personnel and dollars of the Office of the Administrator (EHS).

Figure 10: Reference 57, Page 26

D R A F T
7-22-70

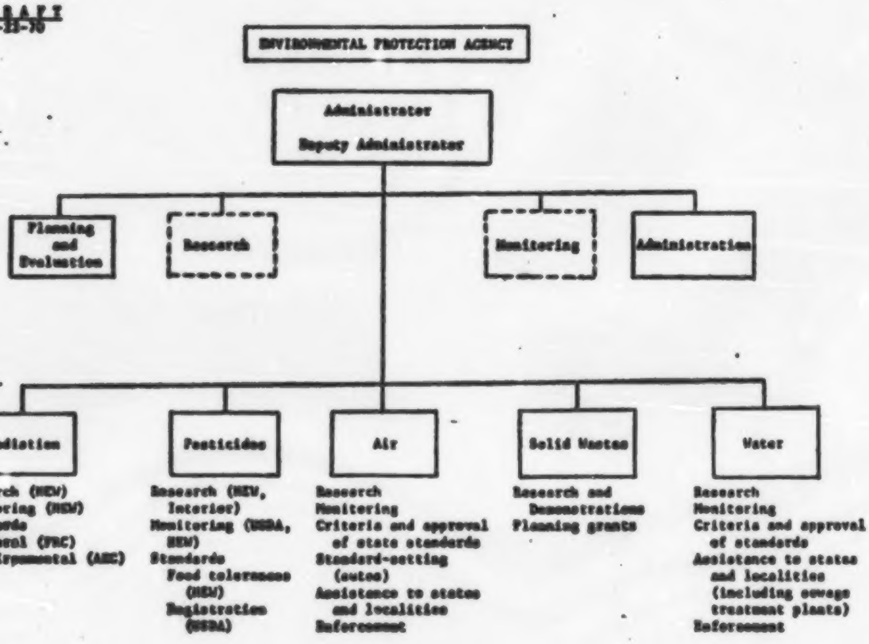


Figure 11: Reference 57, Page 90

Agencies with sole or primary responsibilities in environmental health management in 53 States and Territories and 45 major cities, United States, 1969

Function	Health agency	Health and other agencies [1]	Other agencies [1]	Reported no activity	No information
	53 States and Territories				
Air pollution	37	----	15	1	----
Radiological health	48	2	2	1	----
Solid waste management	41	4	4	1	----
Occupational health and safety	23	4	5	10	11
Water hygiene	37	15	1	----	----
Food service and sanitation	46	----	6	----	1
Food process sanitation	23	1	28	----	1
Milk sanitation	22	3	14	----	14
Shellfish sanitation	9	2	2	----	40
Housing hygiene	15	5	5	----	28
Vector control	33	2	1	----	17
Injury control	35	4	1	----	13
Pesticide surveillance	3	----	5	----	45
Recreation sanitation	11	1	----	----	41
Hazardous products	13	----	5	----	35
Drug surveillance	15	2	21	----	10
	45 major cities				
Air pollution	23	----	18	4	----
Radiological health	22	----	1	22	----
Solid waste management	11	5	23	----	6
Occupational health and safety	8	1	1	19	16
Water hygiene	16	16	9	----	4
Food service sanitation	37	7	----	----	1
Milk sanitation	31	4	3	----	7
Shellfish sanitation	6	----	----	----	39
Housing hygiene	10	3	6	----	26
Vector control	19	2	2	----	22
Injury control	15	1	1	15	13
Pesticide surveillance	2	----	----	----	----
Recreation sanitation	8	----	----	----	----
Hazardous products	2	----	----	----	----

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[1] Other includes special pollution control authority; department of natural resources; nuclear energy agency; department of public works, public service, or sanitation; department of labor, labor and industry, industrial relations, or compensation board; water department or water department board; department of agriculture; consumer protection agency; State laboratory or State chemist; fisheries department or commission; department of conservation; department of housing; department of licenses and inspection; department of community affairs; vector control commission; department of motor vehicles, police, or public safety; board of pharmacy; building department; department of neighborhood improvement; and safety council.

Figure 12: Reference 54, Page 344

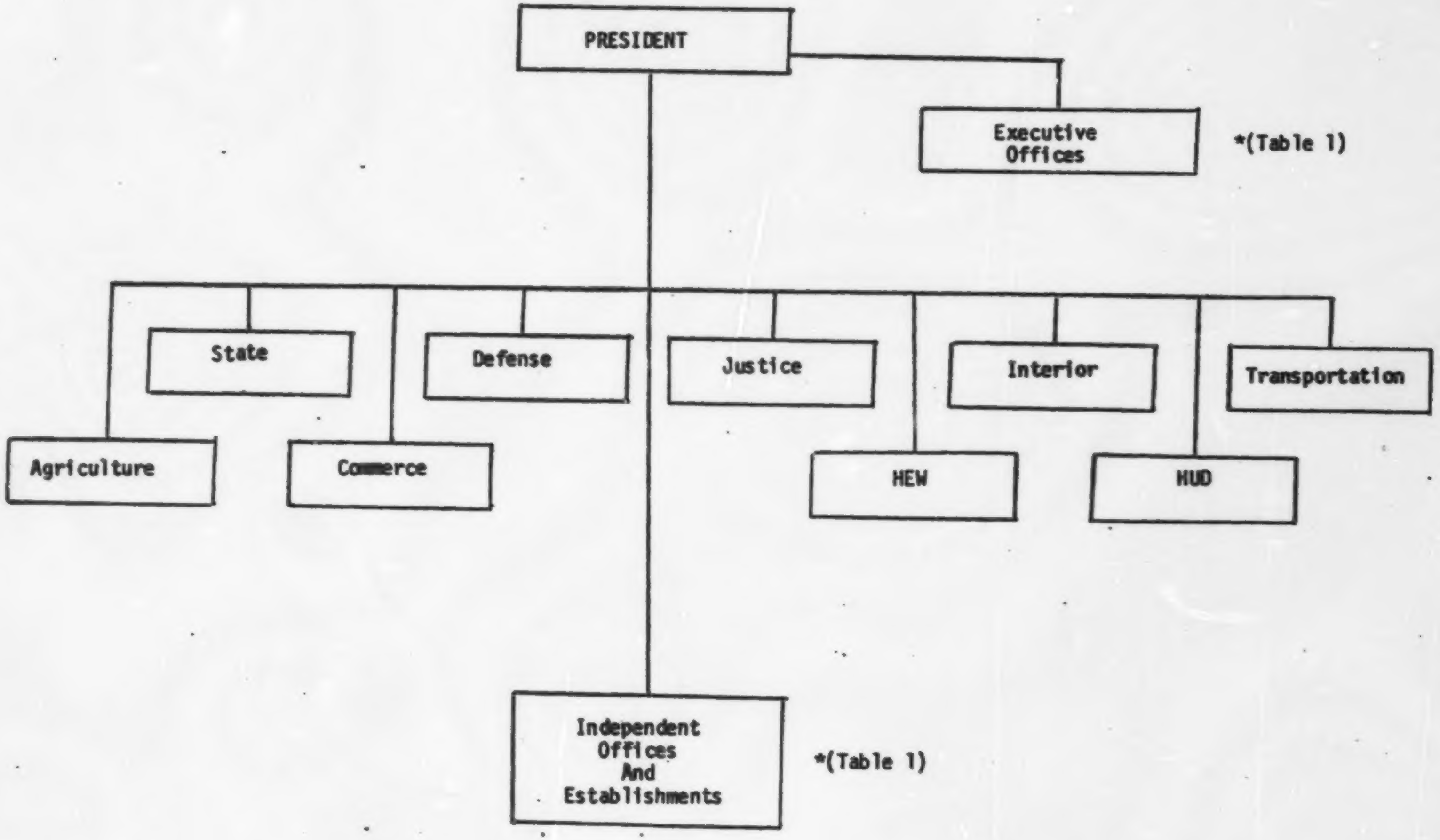

Figure 13: Executive Agencies with Environmental Functions (For more detail, see figure 13a).

Executive Offices of the President:

Council of Economic Advisors
Office of Emergency Preparedness
Office of Management and Budget
Domestic Council
Council on Environmental Quality
    Office of Environmental Quality
Office of Science and Technology
National Council on Marine Resources and Engineering Development
Office of Intergovernmental Relations
    Advisory Commission on Intergovernmental Relations
Environmental Protection Agency?

Independent Offices:

Atomic Energy Commission
Tennessee Valley Authority
Federal Advisory Council on Regional Economic Development
    Appalachian Regional Commission
    Federal Field Committee for Development of Alaska
    Coastal Plains Regional Commission
    Four Corners Regional Commission
    New England Regional Commission
    Ozarks Regional Commission
    Upper Great Lakes Regional Commission
    Citizens Advisory Committee on Environmental Quality
Federal Power Commission
National Water Commission
President's Advisory Council on Executive Reorganization
President's Advisory Council on Management Improvement
President's Science Advisory Committee
Federal Council for Science and Technology
National Science Foundation
    National Research Council
    National Academy of Engineering
Water Resources Council (Figure 13a)
    Water Resources Representative Staff

TABLE 1

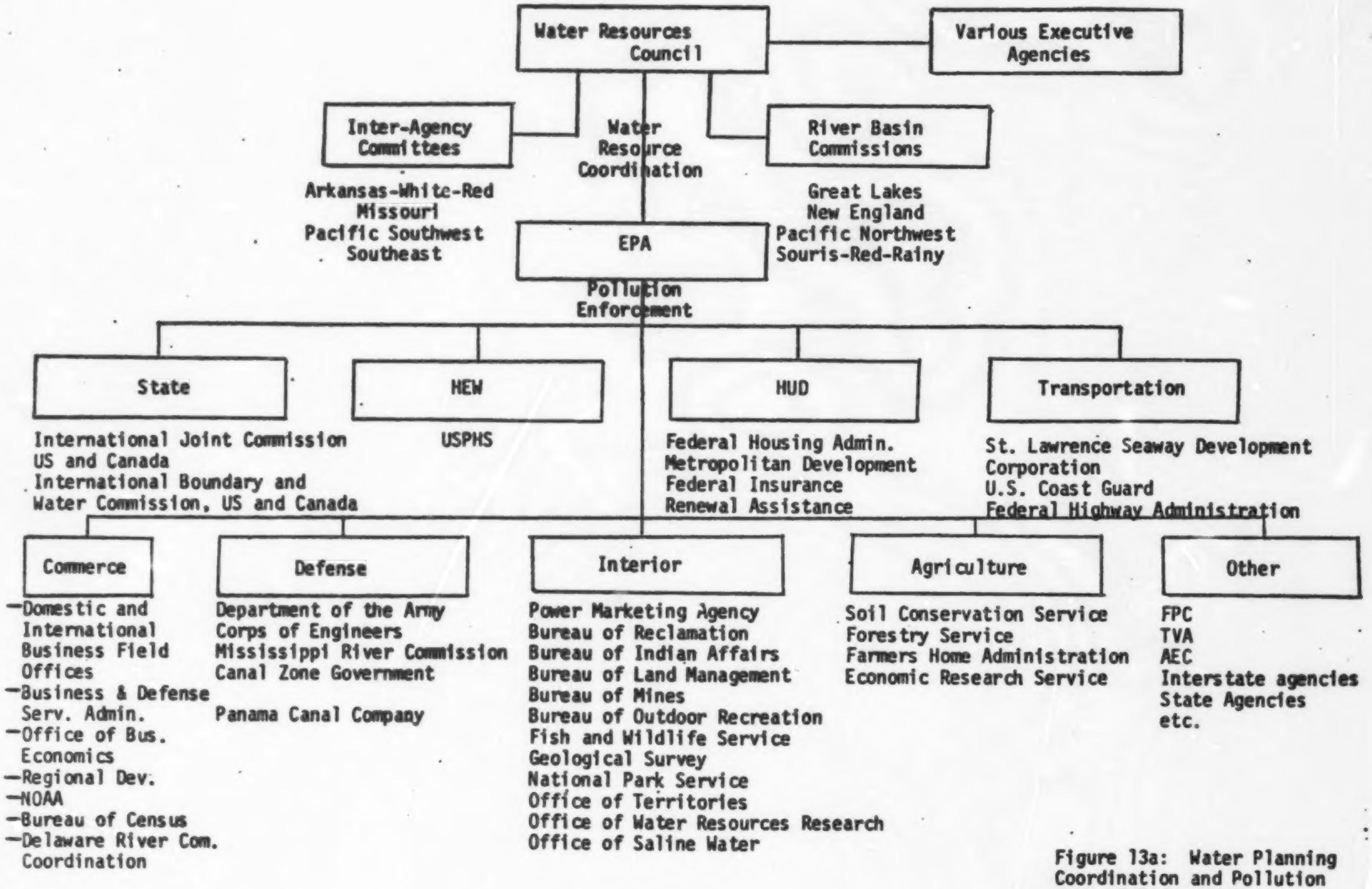

Figure 13a: Water Planning Coordination and Pollution Control Enforcement

Environmental Appropriations for FY 1971 and Requests for FY 1972(1)

FY	Appropriations 1971 ($$10^6$)	Executive Requests 1972 ($$10^6$)
Environmental Protection(2)	1300.0	2500.0
Water Quality		
Operation, Research, Facilities	116.0	138.0
Waste Treatment Grants	1000.0	2000.0(3)
Air Pollution	106.0(4)	129.0(5)
Solid Waste	15.0(6)	19.3(7)
Pesticides	16.5	17.2
Radiation	6.8	8.6

(1) E. W. Kenworthy, "5 Programs Under New Agency Listed for Double the '71 Funds", page 10c, New York Times, January 30, 1971.

(2) Includes supplemental funds of $13M in 1971 and $85M in 1972.

(3) Reportedly President Nixon will propose a three-year $12 billion program shared equally between the States and the Federal Government.

(4) Congress authorized $210M, but under a continuing resolution only appropriated $106 M. The Administration will use a percentage of the $13M supplemental funds in addition to the appropriation shown.

(5) Under the Clean Air Act, Congress authorized $380M. EPA will apply a percentage of the $85M supplemental funds to meet expenditures required over the $129M requested.

(6) Congress authorized $5M. A percentage of the $13M will be applied.

(7) Congress authorized $172M. A percentage of the $85M will be allocated to this use.

Figure 14.

Executive Office of the President,
Office of Management and Budget,
Washington, D.C., August 8, 1970.

Hon. John A. Blatnik,
Chairman, Executive and Legislative Reorganization Subcommittee, Government Operations Committee, House of Representatives, Washington, D.C.

Dear John: Attached is a list of the principal programs related to pollution control and the environment which are not proposed for transfer to EPA. This is the material that you requested Mr. Ash to furnish, and it has been prepared by his staff in collaboration with the staff of the Office of Management and Budget.

There is no broad consensus as to what should or should not fall in these categories. I am sure some would believe that additional items could be added, whereas others would believe that some should be deleted.

As we discussed, the principal reasons for not including these types of functions in the proposed new agency are:

1. The principal purpose of the President's proposal is to provide a manageable, hard-hitting agency which can move forward with a vigorous attack to control pollution, one of the most critical problems confronting this Nation. To add large numbers of diversified programs would tend to encumber the agency with administrative problems inherent in large organisations and dilute the sharp focus on standard setting which we regard as basic to the urgent task of controlling pollution.

2. Most of the activities in the attached list are heavily involved in the basic missions of the departments. We are concerned that moving very far in the direction of breaking these out of existing departments could be self-defeating since it is essential that these departments carry out their basic missions in such a way as to enhance the environment and minimize pollution. These departments must continue to feel a sense of responsibility, and to retain a capability, for helping to improve our environment.

3. As part of the President's staff, the Council on Environmental Quality has the task of flagging gaps and of seeing that all areas of governmental activity related to the environment, not just pollution control, are coordinated. Therefore, these diversified programs do not need to be consolidated in EPA to assure a broad coordinated effort to improve our environment.

4. Although we regard this proposed reorganization as a very important action which is urgently needed, we recognize that other steps will need to follow. We believe that drawing the proposed standard-setting functions together so that environmental control can be looked at in its totality rather than on the fragmented and piecemeal basis we now use, will permit both the executive branch and the Congress to better determine what additional steps may be necessary.

It is my personal view that there is great urgency in establishing the Environmental Protection Agency.

With warm regards.

Sincerely,

Dwight A. Ink,
Assistant Director.

Enclosure

I. RESEARCH, DEVELOPMENT, AND DEMONSTRATION, $287

Most of this research is directly supportive of the mission of the agency now carrying it out and is integrally related with other research programs of the same agency. The results of this research will be available to EPA, and EPA will have the authority to supplement it in order to ensure that the total Federal research program is adequate and complete. In addition, the EPA will have the standard-setting authority which will provide the frame of reference within which other agencies must carry out their research.

Despite the urgency associated with establishing the new agency to deal with pollution control, the success of our efforts also depends heavily upon many of our major Federal departments and agencies carrying out research and other activities which will enable them to move forward with their basic misisons in such a way as to enhance the environment and minimize pollution. We cannot permit these departments and agencies to gain the impression that they no longer have a responsibility to be concerned about the environment.

This research, development, and demonstration activity consists primarily of:

TABLE I.—PROGRAMS RELATED TO POLLUTION CONTROL BUT NOT TRANSFERRED TO EPA[1]

Category	Not transferred: 1971 obligations (in millions)[2]	Comments
Pesticides:		
USDA—Research on effectiveness of pesticides in controlling pests and development of safe alternatives to pesticides for food and fiber production.	$19	USDA's research on pesticides, such as research on more effective methods of pesticide application, is integrally related to its mission of developing agricultural resources. EPA will concentrate its research resources on the environmental effects of pesticides and will look to USDA and other agencies for advice on efficacy. USDA research will be readily available and accessible to EPA.
Interior—Effects on fish and wildlife.....	2	Most of Interior's research on pesticides is integrally related to its other research on fish and wildlife (e.g., research on the reproductive cycle of a particular species of fish or animal). EPA will supplement the Interior research and will share laboratory space and laboratory specimens.
Radiation: AEC—Research on effects, safety, disposal practices, etc.	83	AEC research provides the basis for AEC activities directly related to its primary mission (e.g., research related to the safe operation of its own and licensed activities, including waste disposal, processing and handling of nuclear materials, and more basic research, such as the interaction of radiation with genetic material (DNA). Much of it is conducted at the national laboratories. EPA will have access to the results of the AEC research, and will have the responsibility to identify gaps in the research being carried out and the authority to fund additional research not covered by existing programs.
Solid wastes: USDA/Interior—Control of animal and crop wastes, and recovery of agricultural and mineral resources from waste.	6	Much of this research is conducted for purposes other than pollution control (e.g., resource development). EPA will have the lead responsibility for research on solid wastes and will draw upon the ongoing research programs in USDA and Interior.
Noise: NASA/DOT—Design of aircraft engines and vehicles that are quiet.	31	NASA and DOT's research is closely tied to its research on the safety and efficiency of transportation systems. EPA will have the authority to do research on the ecological effects of noise from all sources, but will look to NASA and DOT for inputs on the technology of controlling noise from transportation. The only standard setting for noise which now exists is in the FAA and relates to the control of noise from only 1 source—aircraft. The R. & D. program is largely directed at the development of engine control devices. Recent research suggests that noise from nonaviation sources for which there is yet no standard-setting authority may be a far more significant environmental hazard. Should Congress enact standard-setting authority in this area, EPA would be a logical candidate as the place in which to put that authority. CEQ is now developing recommendations for a total noise control program for the Federal Government.
Air: USDA/DOT/Interior/DOD—Development of control methods for windblown soil, and control of pollution from agricultural processing plants, airplanes and vehicles, utilities, and mineral industries.	32	Most of the research on the control of pollution will be funded by EPA. However, EPA will draw upon the ongoing research programs in other agencies where it is relevant and helpful to do so and where another agency may have a special expertise to contribute. EPA will review other agencies' research and will be charged with the responsibility for insuring that the overall research program for the Government is adequate and that gaps are filled.
Water:		
USDA—Control methods for animal and processing wastes, sediment, and other agriculturally related pollutants.	17	Most control technology research relating to water will be funded by EPA, but EPA will draw upon ongoing research in other agencies.
DOT—Coastal protection through detection and cleanup of oil spills (Coast Guard).	4	The Coast Guard has certain responsibilities relating to oil cleanup because of its ability to provide an extensive fleet for these operations and its competence in boat safety. The Coast Guard does research directly related to fulfilling these responsibilities. EPA will also do research in this area and will coordinate with Coast Guard.
Interior—Basic research in Office of Water Resources Research, Geological Survey, and control research in Bureau of Land Management.	9	EPA will have the lead in water pollution research, but will draw on research done in other agencies also. The research in other agencies is integrally related to the missions of these agencies (study of ground water characteristics and flow).

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[1] Table does not include water and sewer programs ($412,000,000) which sometimes are considered to be "pollution related" programs, but which also serve other purposes. These programs are included in table II. This table also does not include expenditures by HEW, Labor, and DOD on occupational safety and health ($16,000,000). Many of AEC's occupationally related activities are included because it is impossible to separate them from other AEC activities which are directly relevant to this table.

[2] The dollar amounts shown are estimates subject to determination orders to be issued by the Director, OMB, transferring resources to EPA. Also, amounts do not add to totals since only the principal items are listed in each category.

II. MONITORING AND SURVEILLANCE, $41

EPA will collect, consolidate, and analyze data from all agencies and be responsible for the development of a comprehensive pollution monitoring program. EPA will make use of existing monitoring capabilities of the Government, but will also have the authority to supplement and build upon these capabilities.

The monitoring and surveillance activities not transferred to EPA consist primarily of:

Category	Not transferred: 1971 obligations (in millions)[1]	Comments
Water:		
AEC—Monitoring of radioactive wastes and other radioactive materials.	$17	AEC's monitoring activities are aimed at specific AEC facilities and operations. EPA will have authority for monitoring aimed primarily at the general public and the environment. These 2 efforts will be closely coordinated. The experience and competence residing in the Bureau of Radiological Health, HEW, which has been directly involved in surveillance and monitoring activities related to the environmental impact of nuclear energy operations will be transferred to EPA.
Geological Survey—Water monitoring....	5	EPA will have the lead in water-quality monitoring, but will rely on Geological Survey for much of the actual sampling and analysis, just as FWQA has in the past.
ESSA—Air monitoring................	2	EPA will do extensive air monitoring, but will look to ESSA for monitoring of background pollution in remote areas and for weather prediction needed for determinations of air pollution alerts.
HEW—Surveillance of pesticides in food...	3	HEW (FDA) carries out extensive food surveillance aimed at protecting the public from unsanitary and contaminated foods. Monitoring for pesticides is only one part of this system. Leaving this monitoring in FDA minimizes multiple Federal inspectors checking the same food. EPA will have the authority to fund supplemental monitoring by FDA or others wherever EPA determines it is necessary.
Other agencies—Monitoring of own activities for control purposes.	8	All agencies must maintain the capability of meeting pollution standards in their own activities as required by Executive order. Monitoring is essential to the fulfillment of this responsibility.
III. STANDARDS PROMULGATION AND ENFORCEMENT, $15		
Primarily:		
AEC—Licensing and regulatory activities..	13	The AEC licenses and regulates facilities such as nuclear reactors and special materials with emphasis on prevention of accidental releases of radioactivity and the protection of the worker. With regard to routine releases of radioactive effluents, EPA will set environmental standards which will be enforced by the AEC through its licensing authority.
DOT—Noise control for aircraft.........	2	CEQ is now developing recommendations for a total noise control program for the Federal Government. EPA would be a logical candidate as the place for standard-setting to be located.
IV. OTHER		
A. AEC—Waste disposal....................	45	Capital and operating costs of AEC disposal sites used primarily for AEC's own high-level wastes; for example, the restricted disposal sites at Hanford, Wash.; Savannah River, S.C.; and Idaho Falls, Idaho.
B. Pollution abatement at Federal installations.	213	Funds contained in various agencies' budgets for cleanup of Federal operations. Actions are subject to Executive Order 11507 which will require consultation with EPA as to the adequacy of control measures in meeting standards approved or set by EPA.

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[1] The dollar amounts shown are estimates subject to determination orders to be issued by the Director, OMB, transferring resources to EPA. Also, amounts do not add to totals since only the principal items are listed in each category.

TABLE II

Federal Funding For Environmentally Related Activities[1]

(Not primarily related to pollution control)

	Program or activity	*1971 obligations (in millions of dollars)*
I.	Construction related to environmental quality	412
	Water and sewer programs (HUD, USDA, Commerce, Appalachian Region Commission.)	
	[NOTE: Water and sewer programs are multi-purpose. For example, HUD utilizes sewer programs as a lever to reinforce the goals of its urban development programs, since placement of sewers is a key factor in determining the pace, direction, and nature of urban development; Agriculture's programs represent assistance to rural areas to improve the level of public service provided in those areas; EDA programs provide a subsidy to economically depressed areas for the purpose of encouraging economic development. Transfer of these programs from their present locations would handicap these departments in carrying out their primary missions.]	
II.	Enhancing the environment	1,050
	Primarily: Provision of recreation resources (Interior, HUD, Corps, USDA.) Preservation of fisheries and wildlife (Interior, USDA.) Provision of open space, highway rest areas (HUD, DOT, OEO.) Highway beautification, flood prevention, and urban transportation planning (DOT, USDA, EDA.)	
III.	General science services related to the environment	796
	Primarily: Weather prediction and research (ESSA, DOD, NASA, USDA.) Data buoy program (DOT.) Locating and describing natural resources (USDA, Interior, NASA, NSF.) Basic research (NIH, NSF, Smithsonian.)	
IV.	Weather modification	13
V.	Management of public lands (Interior, USDA, DOD)	211
VI.	Population control and redistribution	136
	Includes new towns program (HEW, OEO, HUD.)	
VII.	Minimizing environmental impact caused by public works activities (Federal and non-Federal) and by non-Federal natural resource exploitation activities	864
	Control of effects from water development and agricultural programs and construction of highways (USDA, DOD, Interior, DOT.)	
VIII.	Education	47
	Primarily: Agricultural Extension Service.	

[1] Almost every agency of the Federal Government has programs which bear directly or indirectly on environmental quality. Consolidation of all such environmentally related activities would involve a major restructuring of many Federal departments, weaken the ability of departments to use their programs to enhance the environmental, and if carried very far, result in a large, diversified agency in which it would be difficult to mount rapidly an effective pollution control program.

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